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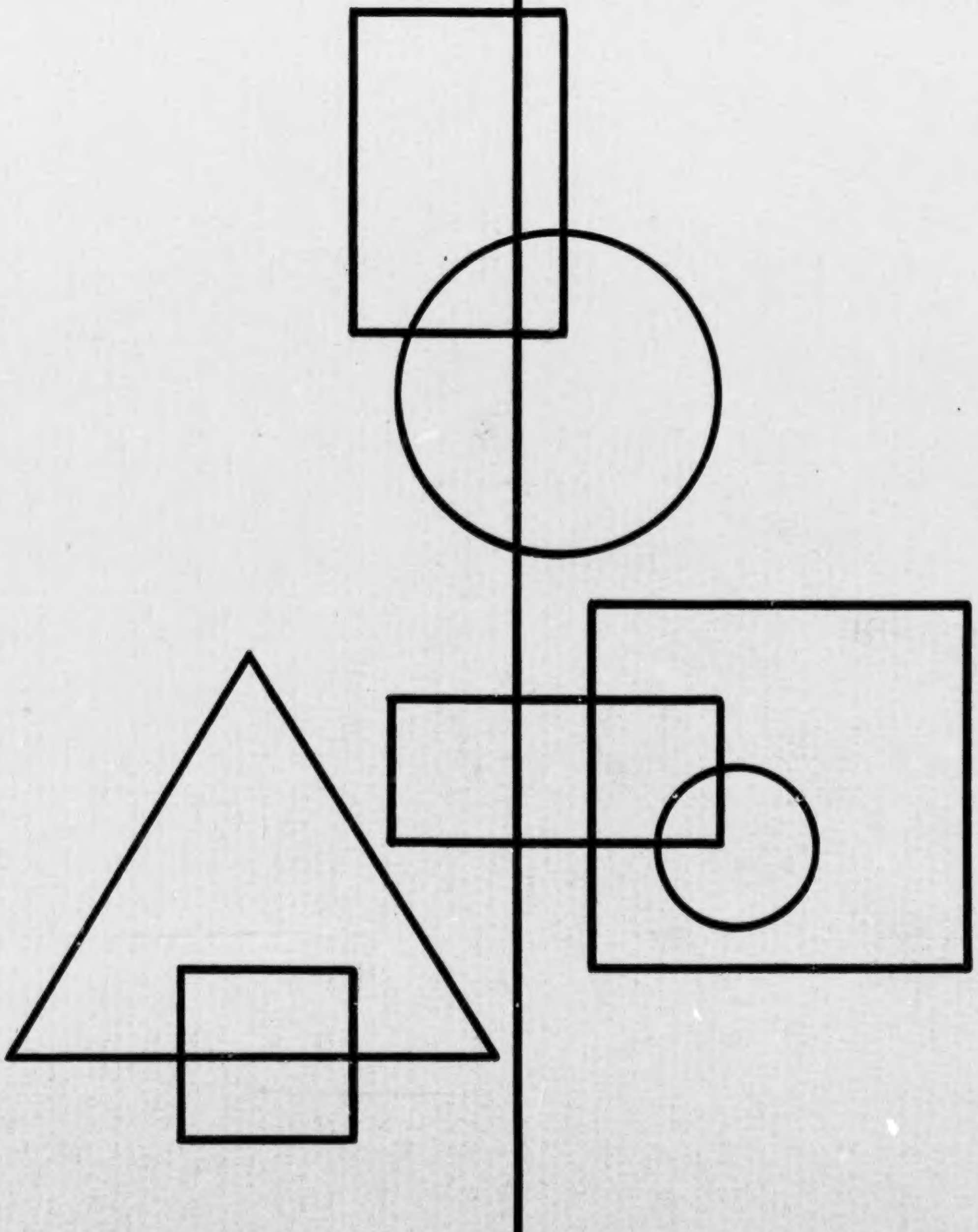
ABSTRACT

The report describes the operation of various programs and parts of programs for the learning disabled (minimally brain damaged) child in Bucks County, Pennsylvania. Covered are student characteristics, special class services available, supportive services (psychiatric, language development, vision, and sensory-motor activity services), and resource room services. Also detailed are the two parts of the itinerant supportive service: support to the child in the classroom, and the prevention and identification program. The major portion of the document consists of appendixes containing information related to placement and classroom analysis of the child, ego development milestones, daily student summary, screening measures used by itinerant personnel, teacher observation, guidelines for prevention program, sample activities and materials used, and the roles of the various professionals involved. (KW)

ED 061668

# The
# LEARNING DISABILITIES PROGRAM
# IN
# BUCKS COUNTY SCHOOLS

MAY 8 1972



EC 041710E

**A Report of Bucks County Public Schools Intermediate Unit**
**Pilot and Demonstration Programs**

Prepared by the
Teaching
Administrative
and
Supervisory
Special Education Staff of BUCKS COUNTY SCHOOLS
in cooperation with
BUREAU OF SPECIAL EDUCATION
PENNSYLVANIA DEPARTMENT OF EDUCATION

July 1971

# FOREWORD

The following report is based on the experience of operating pilot programs for the learning disabled (minimally brain damaged) child for over eight years in Bucks County, Pennsylvania.

Bucks County is a suburban and semi-rural county. It is made up of thirteen school districts with a public school population of approximately one hundred thousand. Each school district has individual school psychological services and a person designated to coordinate all special education services to children of that district.

The Bucks County program is not unique; many similar facets of programs have been reported in the professional literature. This report gives our views of how various programs and parts of programs work. We, in Bucks County, owe a debt of gratitude to many professionals in the field; we have borrowed their ideas freely and now wish to share our experiences freely. The three National Institutes of Neurological Diseases monographs (Minimal Brain Dysfunction in Children - Phase I - Terminology, Minimal Brain Dysfunction in Children; Phase II - Services and Central Processing Dysfunctions in Children - Research) contain both the listings of leading professionals in the field and excellent bibliographies. Therefore, this report does not attempt to duplicate these functions.

It is felt that reporting experiences of program operation is necessary. Sharing knowledge of every day operation is as vital a contribution as systematic controlled basic research. Experimental research with small numbers of children and programs is limited since we are working with children who have a multitude of inter and intra individual styles of learning. At this stage of development, we find controlling the multitude of such variables virtually impossible.

It is also recognized that this is but one county's approach, and other types of programming may be more efficient and/or effective.

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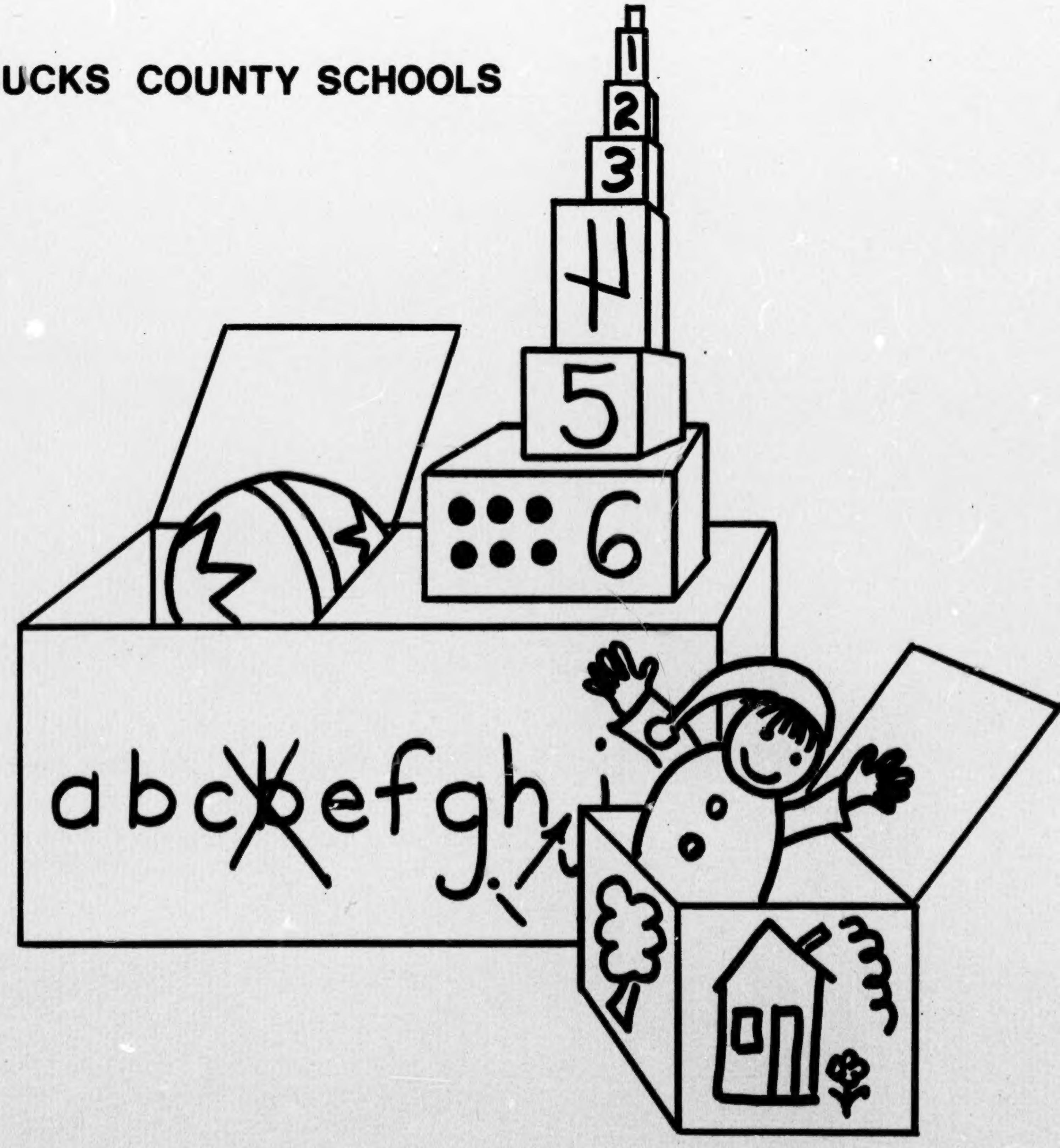
# The
# LEARNING DISABILITIES PROGRAM

in

BUCKS COUNTY SCHOOLS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"What can I do with her — she has **no visual memory** — absolutely no visual memory at all."

"He's **never in his seat** — under it, on it, yes, but never in it. One day he was on top of the bookcase."

"His comprehension is fantastic — he can explain things beautifully and yet he can't read: and he not only **reverses letters**, he **writes them upside down and backwards**."

"He seems to **react to everything** about him instead of the task at hand. He could do his work if I could keep him at it."

"When she has to **remember things** in order she just gives up. Why can she remember details about her vacation two years ago?"

"He want to **read** so badly, I've tried every approach but I can't find a pattern that he can learn by; he's frustrated and so am I."

"She gets angry, gets things all balled up, even her own explanations are **disorganized**. She just doesn't know where to start, she can't seem to **follow directions** yet she's smart enough."

"I thought she couldn't hear and had the nurse check her, but her acuity was normal. And yet she still can't do the assignments without asking a dozen questions about what **I have just explained** to them."

# CHAPTER I

## THE CHILD

Do the statements on the preceding page sound familiar? If you are a teacher you are no doubt saying to yourself - "Hey, I've got a child who does most of those things".

As teachers you probably recognize that these are serious problems and yet many times are at a loss to know what to do. You also know that these children want to learn. "They try so hard". Yet effective learning eludes them and a satisfactory method of teaching them eludes you as their teacher.

This is the child who disrupts your classroom by day and your sleep at night.

These children all give indication of a learning problem. But where do you go from here! These symptoms indicate a disability but they are just that - symptoms. They neither give you the basic problem nor the extent of the problem. They can all or singly be symptoms of an extreme frustration, emotional problem, retardation, sensory problem, or neurological malfunctioning.

CONGRATULATIONS! You have now reached the first stage knowing there is a serious problem. Now what! Now you yell HELP as loud as you can.

For as important as recognizing that children have problems is recognition by the teacher that she can't be expected to be an expert in all areas, and you will need help with certain children.

The help can come from such service personnel as guidance counselor, school nurse, psychologist, and/or psychiatrist. If it is concluded that the child's symptoms are not a result of retardation, primary emotional disturbance, significant auditory or visual acuity problem, chances are that the child is learning disabled.

## CHARACTERISTICS OF THE CHILD WITH LEARNING DISABILITIES

Many children whose overall adequate general intelligence appears normal, exhibit significant deficits in essential learning processes, such as, perception, conceptualization, integration and expression. The identifying characteristics of the pupils may include some of the following among others: 1) hyper-activity and distractibility, 2) language development deficits (auditory perception, memory, discrimination, sound blending and expressive deficits), 3) visual developmental deficits (visual discrimination, memory, perception, eye teaming and other visual developmental deficits), 4) orientation problems (time, size, sequence, laterality and directionality deficits), 5) non-specific awkwardness, clumsiness and fine motor incoordination, and 6) ego developmental problems.

The child with a specific learning disability must be differentiated from those children whose primary problem is - 1) primary emotional disturbance, 2) a mild educational handicap that can be adjusted for in typical program offerings, 3) serious physical and sensory handicaps, and 4) mental retardation - for these children other specific types of educational adjustments are needed.

## A PLAN FOR SERVICE TO THE CHILD

For those children who have been diagnosed as learning disabled and needing specialized services, a plan of education habilitation is needed.

The essential ingredients for providing viable programs for children with learning disabilities require:

1. a basic philosophy that
    - a) recognizes the integrity of the child (program adopted to needs of child instead of vice-versa)
    - b) can be implemented through realistic aims and goals.

2. a diagnostic and prescriptive service that makes use of analyzing as many dimensions of the child's development as is necessary for proper habilitation through analytic teaching;
3. a variety of program options that permit effective placement and/or services to the child;
4. continuous evaluation of the child's progress;
5. a system that returns the child to his peer group and/or educational mainstream as soon as possible;
6. provision for those children for whom returning to the mainstream program will be difficult.

When a variety of program options are available, the educational prescription can be utilized to effectively meet the child's needs with the least amount of separation from the mainstream program. This is consistent with the Bucks County Special Services Department philosophy which is: To provide the maximum amount of support and service to the child with the least amount of separation from the mainstream educational program.

## NUMBER OF PUPILS NEEDING SPECIAL SERVICES

The incidence of children with learning disabilities as reported in the literature varies from one to twenty percent depending on the type of criteria used in such studies. The majority of figures reported place the incidence at approximately five percent of the elementary school population, or about one of every twenty children. However, experience over the past eight years in Bucks County had led to the conclusion that these figures may be high. In Bucks County a combination of efforts by local district and county child study teams shows that approximately two percent of elementary school children fit the diagnostic criteria to the extent that specialized supportive services are needed. Half (one percent of elementary population) probably need intensive intervention such as special class, or daily resource room enrollment, and the other fifty percent can be supported by itinerant service in the regular classroom.

These figures are based on a diagnosis of learning disability (a) using the characteristics described on page 2, (b) only including those children who need specific educational intervention, and (c) excluding the primarily emotional, sensory, simple remedial problem, and the retarded.

These percentages are based on assessment of children in the primary grades, particularly second and third grade. The percentage of pupils in kindergarten and early first grade needing services may be higher due to difficulty in differentiating learning disability from such problems as instructional lag and that myriad of symptoms that lead the teacher to describe the child as "immature". In addition, many teachers do not recognize the relationship of individual developmental milestones to academic performance. There seems to be a tendency to presume that children no longer need the freedom and opportunity to build with construction toys and handle other manipulative games and toys once they have sat down to seatwork in first grade. Realistically, most children need continued contact with three-dimensional activities throughout the primary grades. Denied such support many fall behind because they are pushed into complex abstract activities long before they have internalized the visual imagery necessary to think fluently and swiftly. Before long they begin to manifest educational gaps which, if not caught early, become genuine learning disabilities.

When academic performance is checked near the end of the first grade, focus on the child's learning problem is made by the classroom teacher and differential diagnosis as it relates to educational development becomes more reliable. Indications are that more effort is needed in differential diagnosis on the pre-first and early first grade levels so that preventive programs can be utilized. The other word for preventive instruction is thorough instruction by analytic teaching - that kind of instruction which keys into a child's natural developmental level, leading him step by step through continuous progression, neither skipping steps nor moving on to higher levels before earlier foundations are thoroughly internalized. It cannot be presumed that a child is working totally on grade level just because he was promoted last year. The burden lies on the teacher each year to recheck each child, not just continue to teach in mass at a general grade level. Instead, the child too often merely gets labeled for being behind, but isn't given the individual attention needed to fill in gaps before being pushed on to work for which he isn't prepared.

Undoubtedly figures will be higher if the scope of the learning disability program includes all children who have some academic difficulty. The great majority of these children can be supported through general education programs, such as, transitional support classes, effective elementary guidance, remedial programs, differentiation of reading approaches, team teaching, grouping, etc., and the special education program.

Serving children with educational handicaps is the responsibility of both General Education and Special Education, but serving the learning disabled requires, first and foremost, quality differential diagnosis.

A Personal Note from the Teachers The following chapters in somewhat formal terms describes the implementation of the Bucks County program. However, we, as teachers, would like to state our feeling for the child and the program and what the past eight years has given us in understanding the learning disabled child.

Simply stated, it is recognition and serving individual differences at its finest distinction. If you know and understand the child, only then can you serve him effectively.

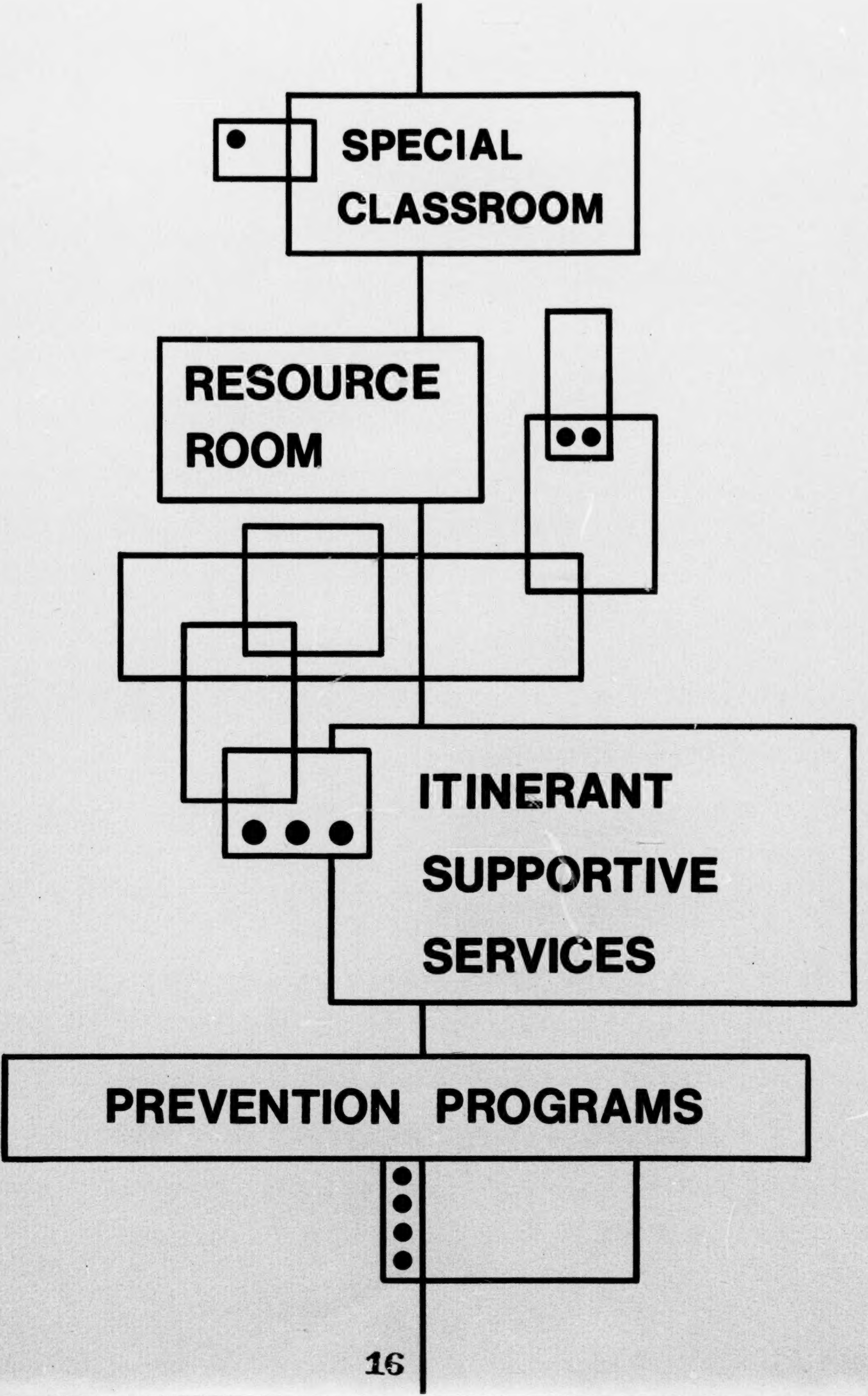
This report is not merely a collection of observations, facts, and figures concerning the Bucks County Program, but also a reflection of the triumphs over many bottles of aspirin, sleepless nights, buckets of tears, anger from knowing the many injustices we sometimes inflict upon children, administrative dictates to satisfy operational ease, and our almost overwhelming despair of our own inadequacies in many cases. We only hope that the report serves to stimulate commitment to quality programs rather than just a number of programs.

We are a long way from having all the answers. We do know, however, what we do not know, but we have made a beginning. And from it all we have become better teachers and human beings. We can say to other teachers and administrators and parents alike - "He's a child, let him grow as a child". Let us stand ready to help him learn and grow, not push him into a mold of our criteria before he is ready. If he has a quirk that does not fit our system, let's bend the system to help him - not bend, and possibly break him into our mold simply because it is easier for us. We don't count - he does. We have had our chance and were lucky enough to compensate in some way to overcome our disabilities. We all have acquaintances who weren't so lucky. They ended up placed inappropriately, or spent most of their day in the principal's office until they were old enough to get working papers. Dropouts are made in the elementary school. Children who are able to compensate will survive the system, but those children whom today we recognize as learning disabled are not able to build their own compensations. We must help them, not pass them on because of size or age, nor label them "oh, he's dyslexic, he'll never learn", and once they leave our room, breathe a sigh of guilty relief and forget them.

A child's mind is a precious thing and a joy to watch as it opens to learn. We, who are supposed to "know better", are committed to open these minds not to close them.

The teachers in the learning disabled classes in Bucks County are totally committed to these ideas and ideals. We have had the privilege of living through eight years with these children, their parents, their teachers, and their administrators, and yes, even their school boards. And if you have read through this paper to this point and have not begun to have some "reality sessions" with yourself, then go back and try again. Failing this try another profession.

If now you can look at your classrooms with 30 or even 40 faces and see the child behind them with sincere interest and concern, then all of our bottles of aspirin were well taken. We welcome you to the team. This is hard work - teaching in the true sense of the word, and you too will be able some day to stand back and say 'THANK GOD IT'S MONDAY, not THANK GOD IT'S FRIDAY'.


SPECIAL CLASSROOM
RESOURCE ROOM
ITINERANT SUPPORTIVE SERVICES
PREVENTION PROGRAMS

# CHAPTER II

## PROGRAMS AND SERVICES

For the past eight years the Bucks County Board of School Directors (presently Bucks County Public Schools Intermediate Unit) has been operating programs for children with learning disabilities (minimally brain damaged). The program started with special classes in which a variety of techniques and program approaches were utilized. These pilot and demonstration classes, at the elementary level, could not possibly provide service to all children, but serve as centers through which programming was refined and possible alternatives studied. From this experience we have made the following observations:

### Program Options Are Needed

The following are seen as basic program structures

Special Classes This program should serve only those children who need the most intensive training over a period of time. These are the children who have serious educational disabilities, showing serious deficits in one or more of the following areas, auditory, visual, language, gross and fine motor skills and spatial orientation. Generally they have ego development problems - self image. They also display a disability in self regulation.

When a combination of these symptoms as seen by a screening team designate that a child cannot survive without intensive training in a special setting, then this child should be placed in a full time classroom. Therefore, full time class placement is designated for that child whose teacher, in combination with other professional school personnel, regard him as unable to perform adequately in his present situation.

Resource Room This program serves those children who have a serious learning disability but do not need a full day program. Programs are generally specific in nature according to the child's disability, and do not aim to program for the full spectrum of academics.

Itinerant Program This program serves that child with a learning disability who can be helped by his classroom teacher with assistance from the learning disability itinerant supportive teacher. The assistance may be a combination of educational assessment, prescription, program adjustment suggestions, and providing materials. Suggestion regarding referral to other supportive services should also be given by the itinerant supportive teacher.

Learning Disabilities Prevention Program This program serves the pre-school and early primary child who show characteristic lags of development which could become serious learning disabilities. Through demonstration, in-service, and consultation, the sensory-motor specialist helps the classroom teacher develop meaningful programs.

Other In some instances the child may have such extensive disabilities that it is virtually impossible for the public school to provide a meaningful program, and for others, tutoring within a general education program may be all that is required.

Commitment to Quality Programs and Services is Needed

If the child needs help we should be committed to giving him the best help possible, not just something better than he had yesterday. If we judge that the child has a learning disability we assume, through a diagnostic-analytic process, that habilitation is possible. If habilitation is possible we must give every support to make the habilitation process successful.

This effort can be implemented through establishment of viable aims and goals. As an example, one can be committed to an operational philosophy that fixes responsibility for quality. In its simplest terms -

a) proper diagnosis is necessary and one person must be responsible to see that the team has completed its tasks properly;
b) placement in the proper type program or service is necessary. One person must coordinate the efforts of the placement team and be responsible for the process;
c) the teacher is responsible for the development of children in her classroom;
d) the supervisor is responsible to give the teacher every type of support so that she can be successful;
e) the administrator is responsible to obtain the support of the professional educational community and financial support necessary to make the program successful;
f) the school board must operate within a policy that establishes community support and financial resources to make the program successful.

When the responsibility on any level is abrogated, another level must carry an unfair burden in trying to run a viable program.

The key point is 'c' - recognition that the teacher is the central figure. We must be committed to making the teacher successful by making sure that persons representing levels d, e, and f, carry out their responsibilities.

The supervisor, administrator and board carry out their responsibilities to the teacher through:

a) Training Assurance that the teacher has the latest information concerning child development (Appendix B and C contains sample child study material used as basis for teacher in-service).

b) Professional Support Assurance that the teacher has at her disposal professionals, such as, psychiatrists, vision specialists, language development specialists, etc. who can help her with the development of children in her classroom.

c) Teacher's Aide Since the great majority of children have unique learning styles and patterns, much individualization is necessary. For efficiency an instructional aide is necessary.

d) Materials Adequate supplies of specialized materials are necessary for the habilitation of the child.

e) Supervision Supervision that assures that all efforts, using latest techniques and innovations, are utilized. Coordination of programs' effort is necessary toward returning the child to the educational mainstream is the basic aim.

If we are going to be of service to children with educational handicaps, we must be truly committed to quality service with specific responsibilities fixed. Anything less is not a service and in some cases could be a disservice.

The following section contains observation, impressions, reflections and suggestions concerning various program structures as viewed by the staff of the Bucks County Intermediate Unit.

## SPECIAL CLASS SERVICE

### Assessment and Placement

Placement is made in full-time classes only when there is evidence that other educational alternatives have not or will not serve the child effectively. Only those students who have had assessments by at least a neurologist, psychiatrist or psychologist, and an educational specialist are considered for placement in full-time programs. (See procedure sheet in Appendix A).

Eligibility for placement of a child has been determined by the assessment team (the child's teacher through referral, local district psychologist and/or coordinator of Special Pupil Services, consulting psychiatrist and the master teacher). The special classroom teacher and the program supervisor collectively determine that the child is indeed suitable for classroom service and final decision for placement is made by the program supervisor. The itinerant supportive and special class teacher then work out a tentative prescription based on all assessments and the child is enrolled.

Appendix E lists the most commonly used screening and educational assessment instruments.

### Parent Orientation to Program

The following (figure 1) serves as a guide to the teacher in her opening discussion with the parents as they visit the classroom. It is important to note that at this time the parents will want to ventilate about:

... past experiences with school systems and their problem

... how they've been shifted from pillar to post.

... frustrations with doubletalk from many professionals in the past

... their anxiety and doubt about present situation

... their own personal problems

... frustration concerning their handling of the child

... defense of the child as being a typical or normal child

... place blame on self rather than facing the reality of the child's disabilities

... often blame each other for mishandling the child, thus reflecting inconsistencies in how they operate at home.

Concluding the formal interview, the parents are given a tour of the classroom and use of the materials are demonstrated.

This is the time to explain to the parents the phenomenon that occurs with a significant number of pupils. That is, after a period of one, two, or three weeks, the child may exhibit some descriptive or regressive symptoms, such as, the child reporting to the parents that he used to like the class but now hates it, or he may revert to thumb-sucking, bed-wetting, etc. These symptoms occur in many children when their defensive patterns for avoiding areas of weakness are dealt with in the classroom. Their symptoms soon disappear when the child realizes he can now succeed where he has had difficulty before. If the regressive symptoms persist, it is explained that the psychiatric consultant is available to step in and give consultative help at this time.

Reporting to Parents The teacher reports progress to the parents of each child at least four times per year. At least two written reports are made and two personal contacts are arranged. The teacher also meets the parents in a group setting at least once a year. Contact by supportive personnel is also arranged when significant findings are manifested.

## FIGURE I

## POINTS TO CONSIDER IN PARENT INTERVIEW

I. Describe program goal

Program for those of suspected average or above average potential who have a major difficulty in learning - goal is to try to find key to the problem and begin to design a proper program

II. Describe approach

Language, perception, ego and academic development  
Physical setup of room  
Materials

III. Make no promises other than we will try to design the best possible program for the child

IV. Many supportive services are offered -

Language Specialists; Visual (Optometrist); Psychiatrist, etc.

It is expected that parents follow through on recommendations of professionals. (Placement is contingent on this type of cooperation)

V. Make clear on how you will report to parents on the child's progress

VI. Make clear on what you expect of them

VII. Transportation procedure

VIII. Forms necessary for completion

IX. Others

## Where to Start - Assessment by Teacher

The "experts" have given you their impressions of the child and the parents have offered their explanations. Now let the child give you his impressions. Give him activities and do things with him to let him show you how he learns.

Example If he likes to play with cars, get down on the floor and play cars with him, for only when you get down on the child's development level will you establish a relationship upon which you can begin to build an educational structure.

For each child you must provide an opportunity for development in sensory motor, language and ego growth basic skills. For some children the teacher goes back to very primitive levels to insure success as well as to determine competencies. If a child moves through simple material rapidly, you are assured of his ability. If he has difficulty, you've found your starting place. For some children this might be point zero. For one child point zero might be playing with dolls or a teddy bear. For another it may be building with blocks on the floor, or merely taking pieces out of a box and putting them back in.

## Age

It is much more effective to plan and design a program for a child who enters a special class for brain damaged children before age nine. Age ten seems to be critical. Children who are ten years of age should only be admitted if they have demonstrated some basic reading skills. For a child who has very little or no reading, entering the program at age ten the chances of success are slight. Practically all children who demonstrated average potential who entered the program at age eight or less, were returned to the mainstream educational program.

## Location and Grouping

Since a goal of the program is to return pupils to the mainstream educational program, it becomes imperative that the classrooms be located in regular elementary schools so that integration of the pupils into regular classes on part and full-time basis can be efficiently implemented. From a demonstration standpoint, the seven classes operated by the County Board have been located in two single classroom units, one two classroom unit, and one three classroom unit. Experience has shown the following:

In a single classroom unit the teacher spends much of her time in public relations work explaining to regular class teachers and other professional personnel in the building the functioning of her classroom. She gets very little help or understanding since she has nobody with whom she can communicate on a daily basis regarding her program. It is suggested that, when planning programs, provision be made for inclusion of at least two teachers with similar programs be in proximity so that they can share ideas and materials, but more importantly, serve as mutual ego banks.

In practice, the three classroom unit seems to have the most flexibility in that modified teaching approaches are possible and one can take advantage of the teaching strengths of three different teachers. It is suggested that at least these three areas should be considered when three teachers are in proximity. One teacher be knowledgeable in academic readiness activities and primary levels, that one has strength in academic development and remediation, and that the third has strength in specialized techniques, such as, relating movement to learning, perceptual activities, etc.

## Instruction

In the early stages of program development, approaches relied heavily upon specific instructional techniques for the education of children.

Even though a variety of techniques were available, (Frostig, Kephart, Cruickshank, etc.) and certain success was achieved, it was determined that approaches that emphasize specific techniques did not produce academic and social growth at an acceptable rate. Indications were that the teachers needed more insight into child development and educational development milestones. Emphasis in the pilot programs was shifted from a technique oriented approach to a child development approach emphasizing the child's abilities and recognizing his disabilities. This required, among others, a study of the following developmental dimensions: Language and Vision and their perceptual components; Ego; Tactile kinesthetic-motor, and academic areas. It is only when these developmental components in each child were understood that specific educational prescriptions could be designed and implemented. As the teachers developed insights concerning the child's developmental levels, techniques tended to flow automatically as long as a variety of materials were available. In this approach toward understanding of development, reliance was initially placed upon the child development theories of Jean Piaget and Anna Freud. The cognitive stage analysis of Piaget and ego development stage analysis of Anna Freud seemed complimentary in understanding behavior, psychological unfolding and intellectual development. To compliment the training and background of child development, it was also determined that, even though teachers may be expert in some areas, to be effective with each child she needs specific supportive services of professional personnel within her classroom setting.

Children with specific learning disabilities are not a homogenous group. There are many and various reasons for the disability, therefore instructional offerings are basically on an individual and small group basis, using a variety of techniques and materials for each child (See appendix K for specialized materials list). Because of the nature of an individualized curriculum that is continually being changed for each child, it is specious to argue whether one technique is superior to another. The teacher uses a multi-sensory approach and limits and expands it as needed by the child. This approach does not lend itself to experimental design since it is impossible to hold the multiple variables to any degree of constancy. The multi-sensory approach works, and which particular component was most effective is not as significant as the conclusion that a combination of effort has led to positive performance by the child both academically and from a self-esteem point of view.

The most efficient type of programming seems to be (a) the child development approach for understanding of the children, and (b) a multi-sensory approach for teaching. Teaching to the strengths or weaknesses is determined by the reaction of each child to the teaching direction. A generalization as to which is the best is difficult to make since the child's learning style seems to be the best basis for making such a decision.

A child's entrance into an L.D. classroom is usually accompanied by a variety of records which describe his disability and history in great detail. Our learning disabilities teachers have come to view such records as a testament to what a child "has been" in the past, rather than rely too heavily on them as an indicator of his present mode of operation. Often the tighter structure and smaller class size alone offer enough change in environmental condition to allow the child to exhibit fewer, or less severe reactions than were reported in writing. Occasionally a child "acts out" even more severely for a while, as the new environment allows the teacher to keep a much tighter reign on his impulsive behavior. Either way, the teacher expects behavior which is not indicative of the child he will be in a few months, even a few weeks. Much behavior which was looked upon as disciplinary and anti-social in a regular class is expected here. It isn't necessarily encouraged but it is dealt with, not ignored, and it is considered to be a temporary manifestation of a condition which will eliminate itself in time. As the teacher offers the child experiences that bring success and self-fulfillment, much of the negative behavior diminishes and new achievement-oriented behavior appears. The experienced learning disabilities teacher knows this can happen very rapidly for some and is not surprised if it takes six months to a year for others.

Thus, as she begins upon a SKILLS-ORIENTED program for the class, she individualizes her presentation of basic skills materials according to the learning needs, academic weaknesses, and behavioral reactions of each child.

## Structuring for Academic Skills Development

In the usual class of eight, the teacher can often use many of the same type materials for the whole class, but adapts the sequencing and implementation according to the specific problems faced by each child. The teacher must have a technique of presenting lessons in the first few days of school to informally assess a child's present style of operation and his major areas of weakness.

A child may show himself to exhibit a visual deficit combined with a short or long-term memory deficit, or he may have a language or speech problem combined with an auditory problem. These deficits usually were brought to light through pre-admission testing. What usually did not show up on such initial testing was the way a child behaves because of such deficits. The learning disabilities teacher is more interested in how he acted while being tested than in score results.

Whatever the innate area of weakness, the child has acquired many modes of behavior which inhibit successful accomplishment. The L.D. teacher spends much time watching how the child works during those first few weeks of school to determine the inappropriate habits he has acquired which slow him down, or cause him to waste time, or work in a disorganized manner.

A child may never have had the variety and depth of language experience at the pre-school level for fluency and basic vocabulary development when he came to school. One year in kindergarten may have merely opened him up to conversational and story telling skills. He may need much more practice talking, naming things, and organizing ideas sequentially before he sits down to formalized reading programs and workbooks.

At the primary level, the L.D. teacher makes sure such a child is given a variety of experiences in social and language skills before requiring him to begin paper work. Another child may never have had the variety of play experiences necessary for developing self-confidence and initiative. This child is encouraged to spend more time with manipulative materials than others though he may already be 8 or 9 years old. Many children entering an L.D. classroom have never had enough opportunity to build things or construct with large manipulative toys. Their hands are untrained to hold things, their eyes unable to judge distance and directionality relationships and their judgment of the weight of things when balancing and stacking inaccurate. These are usually the same children that need gross-motor activities for a far longer length of time. Whatever the weakness, each child must be given the opportunity to fill in the gaps in this early educational exposure. The development of these skills on an individual basis constitutes the basic training program for pre-reading. Once this training has been given and inappropriate habits reduced, reading readiness activities may be presented.

Reading, Writing, Spelling In the regular classroom, teachers are required to spend much time on subject matter, teaching vertically to cover a prescribed amount of material in a typical school year. The L.D. teacher operates, by contrast, much more horizontally laying a broad foundation for skills required to operate with success.

The skills needed in reading and writing are based on a thorough grasp of the sound-symbol relationship. Some reading series today stress oral decoding but give only a beginning introduction to visual recognition, hardly teaching how to print the letters before pushing children on into writing whole sentences and taking oral dictation in spelling. A child with even a slight visual deficit soon gets lots and cannot keep up, as he needs much more practice in the skill of printing (letter formation, first copied then memorized) before he is able to function with the speed and automaticity needed to keep up with the rest of the class.

If the child has an auditory and/or visual memory problem, he may have great difficulty retaining the sounds that match the printed letter and will also need much more practice (and individualized attention) than is given in the usual classroom. If a child has a severe visual deficit he not only cannot make the letters that form the words and sentences, he cannot place the components on the correct rows, or make all symbols in related size, nevertheless remember punctuation rules and to leave space between words plus remember what he wrote!

He does not need the low letter grade the teacher then places on his paper (while still in regular class) to show him he is not doing well. One look at his paper full of "chicken scratches" compared to his neighbors neat readable script shows him "he cannot" do it.

When he arrives in the L.D. classroom his new teacher must not only convince him "he can" do it, she must also structure her teaching of alphabet in sufficient steps to enable him to do it. Whatever her method, it must teach him to do what he has heretofore not been able. So, too, in reading. Many approaches are available. Whatever approach or combination of approaches is decided upon, the child must come to understand and use independently the system taught. Hopefully, it is the system that best matches his own learning style.

Mathematics Before the child can progress through various stages of mathematical computation, he needs the automaticity of visualization that he achieves through manipulation. It is therefore important that the child understands the material so that he can transfer his learnings to newer and more abstract forms of mathematics. The appendix gives suggestions regarding materials needed for basic training in math.

### Number of Pupils Served

Considering the variety of levels and types of disabilities encountered in each class, it is deemed that eight children per class is an optimum number. Less lends to over-emphasis of details on certain developmental levels of pupils and more pupils seem to affect the rate of return to the regular program. Under certain circumstances where a significant degree of homogeneity is found in the class, as many as ten pupils can effectively be taught. The teacher should be the sole determiner as to the number of children she can work with effectively after seven pupils have been enrolled.

### Returning Children to Regular Program

As the program is on the elementary level, all pupils are returned to the regular program at age twelve or before. Of the children who have terminated the classes, 80% returned to regular program, 8% enrolled in private schools, and 4% entered special class (judgment of average potential was not borne out by long term performance). In 8% of the cases the program was not successful. Indications are that in spite of every effort, for certain pupils the key to development is difficult to find even under directed effort.

Of those who returned to regular program, 20% were placed at proper age-grade level, 40% were one year behind, and 40% were two years behind. Of these pupils only eight percent needed follow-up supportive services indicative that the progressive integrating of pupils in regular program is an effective technique.

### Length of Stay

Length of stay in the special classroom was dependent on age of entrance, type of disability and strength of self image. Those entering below age eight, the average stay has been 2½ years; those entering at age eight or later, average stay 3½ years. Significantly, those pupils who have stayed the longest have had auditory perception and language development problems. Shortest lengths of stay have been for those pupils whose primary problem was visual perception. Intermediate lengths of time were by those pupils who had milder across-the-board problems with poor self images. Working on self image and praise for performance has seemed to help these children far more than academic attention in the beginning.

It seems to take at least one full school year to help a child change his self image and another year to fill in gaps in instruction at fundamental levels before growth begins to manifest with any noticeable speed in most cases. Most teachers report that the problem with children in learning disabilities classes is 70% emotional and 30% neurological, though the original disability may have stemmed from a neurological base. Only if the emotional overtones are diminished considerably can the teacher even get down to the act of instructing her class academically. Hence the teacher needs much skill and training in handling emotional crises in judging when to "push" and when to "hold back" certain children. Continued training in developmental psychology is vital to keep teachers aware of the overall growth patterns in child development.

## SUPPORTIVE SERVICES

Since the teacher cannot expect to be an expert in all facets of child and educational development, it is necessary to supply her with such supportive service that will make her efforts effective. The following are deemed to be essential supportive services:

### Psychiatric Service

Psychiatric services to the classroom emphasizes service toward

(1) ego development of the children; (2) parent conferences, and (3) in-service consultative services. In practice the teacher uses approximately one-half of the psychiatric service time in an instructional way, i.e., the psychiatrist observes the child in the classroom in terms of behavior and ego security in the child's approach to every day school tasks. The teacher and the psychiatrist then discuss whether the types of approaches she is using are acceptable from an ego development point of view. The psychiatrist also observes the effect of medication (approximately one-third of children are on medication) on the child and its effect in his learning style. The teacher may also use the psychiatric service to gain more insight into the child's individual and group behaviors and relationship with his parents and siblings. In this way the psychiatrist is of service to the child, with the teacher being the coordinator of the psychiatrist's activities, so that he becomes an effective educational developmental tool to the teacher.

NOTE: See appendices L, M and N for more detail concerning the various supportive services.

It is determined that each teacher be allotted approximately one-half day per month for psychiatric services to the children of her classroom.

### Language Development Services

Within the Bucks County program approximately 25% of speech therapists are pursuing the goal of supplementing their speech correction proficiency with the study of language development. These persons are utilized in the learning disabilities program to aid the teacher in developing insights into the language development process and adjusting the program according to the developmental language needs of the children.

Specialized diagnosis, methods and techniques provided by the specialist, help the teacher to design a better program for the children. It is deemed that this is a necessary service to the classroom teacher. As the teacher gains experience and insight, she may not need continued services on a regularly scheduled basis, but will only need periodic use of the service. For beginning teachers it is recommended that language development specialist service be available to her classroom for the equivalent of three days per month, in one to two hour units. As the teacher becomes proficient in this area she will determine need for future services.

## Vision Services

Vision services as related to learning are available to all classes in Bucks County. Emphasis in county classes for learning disabilities is on making the best use of the visual channels as related to other channels. Visual perception, visual motor and other dimensions of vision are checked in relationship to learning efficiency, and how this channel can be complimentary to other modes of learning. Each child is screened and a specific action, if needed, is prescribed. Specialized materials and apparatus are designed by the vision specialist and are used by the teacher only under the conditions that both the teacher and the optometrist feel it is necessary. It is recommended that vision services be available to the teacher, particularly for the first year on a scheduled basis for approximately the equivalent of two days per month. Indications are that after the first year, the vision development specialist should be on call to the teacher rather than on a regularly scheduled basis. The on-call time should be equivalent to four days per year per class.

## Sensory-Motor Activity Services

Even though specifically scheduled services were not available to all of the special class teachers, all teachers obtained indirect services for their children through in-service meetings regarding sensory-motor programming. Two of the seven teachers in the program had primary training and experience in physical education where they observed first-hand and accepted the concept of individual differences. This information and adaptation of sensory-motor activities made a significant contribution to the program. Another had been an art teacher, gaining invaluable visual background.

Sensory-motor activities are an integral part of the Bucks County Program. It cannot be determined whether the sensory-motor activities are directly related to academic progress per se, or whether their effect was to enhance self image, however, where a well planned sensory-motor program was in effect, the total performance of the child was significantly enhanced. It is recommended that all teachers of the learning disabled receive specific training and supportive services regarding this area.

Conclusion Regarding Supportive Service The cost of supportive service in the Bucks County Program is probably one of the most efficient use of funds regarding the child's development. This investment of making the teacher an effective coordinator of all dimensions of the child development is not as costly as it seems. It increases the efficiency and effectiveness of the teacher. In addition, after a period of growth in the support dimensions discussed, the teacher needs very little, if any, scheduled time for such supportive service, except for continuous psychiatric service.

## RESOURCE ROOM SERVICE

Resource room services are comparatively new in Bucks County. The three district operated programs were not operating at full programming level until the middle of the present academic year. Therefore, it is too early to form solid conclusions, however, certain considerations are made. The Resource Room can serve certain vital functions, such as:

- Serving those children who have a serious learning disability but do not need a full day program;
- Not separating the child totally from the mainstream program;
- Providing services to more children than full-time classes (15 to 25 children per year, vs. 6 to 10 in full-time class setting);
- Providing for coordinated efforts by the resource room teacher and the child's regular teacher in efficiently habilitating the child;
- Ability to serve as a halfway house for those children who were in a full-time program but now need less services and for that child for whom itinerant supportive service or tutoring has not provided enough effort;

The Resource Room can present a similar program to that offered in full-time classes, namely:

1. Limit physical stimuli
2. Structured program
3. Small increments per presentation
4. Concrete presentations
5. Use of proper sensory channel
6. Tolerance for behaviors
7. Atmosphere conducive to ego development
8. Multi-sensory sensitivity in presentations
9. Multi-sensory feedbacks
10. Self image, body image enhancement.

Interim reports indicate that the Resource Room concept works best under these conditions:

- Service per resource room be limited to children from one or two schools because of transportation problems and coordination problems with the regular class teacher;
- Facilities must be adequate to pursue not only academic adjustments but provide sensory-motor program services;
- Younger children be enrolled earlier in the school day;
- Care must be taken that important academic subjects are not missed while child is away for resource support or other lags are continually perpetuated;
- Continuous in-service is necessary to familiarize regular classroom teachers of opportunities and limitations of the resource room;
- A wider variety of materials is necessary since more children at different age levels are served;
- At least as much supportive service is needed as for full-time classes;
- The Resource Rooms concept will work best as a part of a total program that includes prevention, itinerant supportive programs and full-time classes.
- Care must be taken that if resource room is designed for the learning disabled child that it does not become a 'dumping ground'. Placement conditions must be as stringent as for full-time class placement.

## ITINERANT SUPPORTIVE SERVICE

## PART I - SUPPORT TO THE CHILD IN THE CLASSROOM

The itinerant learning disabilities program has, over the past three years, been an effective program of service to the school districts of Bucks County. It is almost impossible to measure statistically its working value, but its acceptance, the attitudes of change of direction in curriculum, adoption of new techniques in the early elementary grades, and the use of specialized materials and techniques recommended by learning disability personnel, are positive indication of its need and success.

The itinerant learning disability pilot program grew out of a need to extend service to those children not enrolled in special classes for the learning disabled child. To make districts aware of the learning disabled child and his needs through identification, curriculum and in-service programs has been the main function of the program to date. The ever increasing caseload of the itinerant teachers gives indication of the effectiveness of the in-service program.

This program of service to children is performed by teachers who have had full-time Learning Disabilities special class experience. Three master teachers function in the following major areas of service:

1. Supportive service to teachers
2. Direct service to the child
3. Preventive and developmental program services

The type of service offered varies from district to district depending on the level of sophistication of psychological, guidance, remedial, developmental and special services provided by local districts.

Supportive Services The Master Teacher aids early childhood, kindergarten, transitional first grade and elementary grade teachers in providing a meaningful program for pupils with learning disabilities, through:

1. Providing materials and curriculum adjustment suggestions;
2. Demonstrating new materials and techniques needed for more efficient learningby the child;
3. Helping the teacher gain more insight into the dynamics of the learning problem of the child;
4. Helping the teacher become a better observer of the child's learning problems and development through specialized prepared literature and observation scales (See appendix F)

Direct Services to The Child Direct services given in the form of educational assessment and diagnostic teaching. The educational assessments complement the neurological and psychological findings, school history, interview with teacher, and are in the direction of determining learning style and approach necessary. Diagnostic teaching is based on case histories, testing reports, observation and the use of specialized materials and techniques specially selected according to habilitation needs of the child for the process of analytic teaching.

Preventive Services The preventive and developmental program is designed primarily to serve children in small group settings within their classroom in enhancement of learning development through a sensory motor movement, perceptual and language development program. The program is coordinated by a Master Teacher who has specialized training and abilities as a sensory-motor, or learning disability specialist. The Master Teacher works with both the regular class teacher and children until the specialist and the teacher feels she can handle the program.

In addition, the Master Teacher acts as a consultant to:

1. Pre-school, kindergarten transition, primary classes.
2. Reading specialists, adaptive physical education teachers and other professional personnel through in-service meetings, demonstration of materials and techniques, and planning for educational systems to reflect adjustments in the dimensions of perception, motor, language and ego development.

Activities, games, language kits and programs, and sensory motor techniques are employed, however, the desired outcomes are the enhancement of body image, coordination, laterality, directionality, temporal projection, perceptual and conceptual development.

Specifics of the preventive program begin on page 41.

## Specific Procedures for Working with Teachers and Children in Districts

1. Establishment of a referral system or form that provides as much information as possible about the child's educational performance and is channeled to the master teacher.
2. The itinerant teacher then confers with the regular class teacher about the student, and the teacher observation schedule (appendix F) is used as a base to pinpoint the area of major concern.
3. Classroom observation of child.
4. The child is seen for educational assessment, if necessary.
5. Testing results and tentative curricular adjustments are discussed with the teacher after corroboration with any other specialist involved with the child, and specialized materials are left with the teacher, if needed.
6. According to procedures established with the school district, the learning disabilities specialist shares information with the speech therapist, reading teacher, nurse, etc., and additional adjustments are made, if necessary.
7. Itinerant teacher explains to principal the educational process adjustments designed for the pupil and possible additional services that the child may need (adaptive physical education, language services, etc.)
8. The elementary guidance counselor provides continuity by gathering materials available by the district, coordinating the total procedure and sharing the information with parents.

9. A specific scheduled time is established to meet with the regular class teacher to determine what additional materials will be needed, what additional help the teacher will need until she feels comfortable with new techniques, establish a procedure for follow-up until disposition is final. Final disposition is made by the classroom teacher and the master teacher.

10. Evaluation of the services offered is made by the itinerant teacher.

Other Services Additional services by the master teacher include:

1. Follow-up and supportive services to pupils as they return to regular class upon termination of special class placement.

2. Aiding school districts in determining the number of children and types of additional programs needed for the learning disabled child.

3. Assist local districts with new program arrangements and support particularly in the early stages in resource rooms and classes.

4. Assist local districts in referral for additional county or community service.

5. Consult with local districts concerning unique learning materials for regular class use.

6. Establish resource material for:

   a) existing special classes;
   b) district resource room personnel;
   c) tutors;
   d) regular classroom teacher;
   e) specialists, e.g., reading and transitional teachers;
   f) administrators.

7. Assist other types of special classes concerning materials and techniques that may be effective for all children.

8. Provide pertinent, timely research information from publications and journals upon request.

Arrangements by Local Districts to Facilitate Master Teacher Utilization

1. One person in each district to be designated as the referral source.

2. Have complete records on child available to master teacher.

3. Classroom teacher be given some release time to discuss curriculum adjustment for the student and follow-ups later in the year, also coordinate time to meet with any other specialist who sees or has recently seen child - psychologist, reading teacher, speech or language therapist, classroom tutor, etc.

4. Time be made available for short in-service for teachers in a significant number of pupils with problems.

5. Encourage use of volunteers and aides to help the classroom teacher where a significant number of pupils with learning disabilities are found, such as, in some kindergarten and transitional programs.

6. When a program is set up with a child, school district informs the parent of program service. Master teacher will be available when in district to confer with parent, if necessary.

7. Provision for work space for educational assessment and the diagnostic teaching process.

8. Arrange for professional services to corroborate findings when necessary.

9. District to budget for specialized materials needed for children with learning disabilities and return or replace all expendable materials extended to regular class teachers.

10. Arrange for tutorial or remedial services within the policies of local district procedures if recommended by master teacher.

11. Not to expect the Master Teacher to make policy decisions regarding grading and placement of the educationally handicapped pupil.

## Criteria For Selection of Master Teacher (Learning Disability Specialist)

The Master Teacher must have a practical knowledge of child development, ego development, and learning development. In addition, must have one or more of the following professional strengths:

1. Demonstrated success in teaching children with learning disabilities, and/or

2. Practical knowledge of the educational diagnostic prescriptive process, and/or

3. Practical knowledge of language development and educational concept development, and/or

4. Practical knowledge of both auditory and visual perception process, its applications and limitations in a school program, and/or

5. Demonstrated classroom success in development and remedial processes in the regular classroom, and/or

6. Certification and Master's degree or working toward certification and Master's degree.

Program Results The guidelines for the itinerant program are very explicit and state how an itinerant program must be programmed to effect a reasonable method of operation. During these first three years of this program it has, in most cases, been followed and in such cases the program functioned to almost ideal results. It was, in some districts, impossible to have one central coordinating source, resulting in less effective referrals and service. In these cases diagnosis became the main function of the itinerant teacher and suggestions for program adjustments were not as extensive as was necessary. In these districts too, the child referred was not always the truly learning disabled child, but rather the child with a learning problem rooted more in emotional disturbance, retardation or a slow learner. The social environment also was the basis for many referrals. The disadvantaged child presents a unique syndrome that requires specific attention also. The itinerant program can be of great help to these children, but if the itinerant teacher is bogged down with such referrals, there is little chance to reach the 1 to 2% of the school population who are truly learning disabled.

In the beginning the acting out emotionally disturbed children, the slow learner and retarded, are the first to be referred. After working in the district for a short period of time the visual and visual-motor, reading problems, and children with subtle problems are referred. Auditory perception problems, and its concomitant language development aspects unfortunately are among the last to be given due consideration. These children do not usually come to light until the later primary grades because, until this time, their learning is basically visual with auditory directions. During the later primary grades, instructions are given primarily with auditory clues and the child with an auditory problem begins to fall behind. The emotional reactions are usually quite severe with this child because suddenly he is failing in every way. This child may even begin to lag behind in motor activities because of the failure symptom he has developed. An early clue to the auditory problems is voiced early in the first grade of school, or even in kindergarten programs where sounds are taught - "he knows his letters but he is still not learning to read". At this point a teacher can ask for consultation with the learning disabilities specialist and perhaps alleviate a serious problem. Inservice programs with the classroom teacher is vital and districts must provide some classroom release time to talk with the learning disabilities specialist.

Cautions Itinerant learning disabilities specialists must be continually under guard so as not to offer services as a substitute for those areas that the district should provide. For example, in districts where there is no reading specialist, there is an attempt to have the learning disabilities specialist work as a reading specialist. In those districts where there is not enough psychological services, attempts are made to have them extend their basic testing program to provide more psychological services. On occasion the learning disabilities specialist is placed in a difficult position whereby she is called upon to make a comment or judgment of possible differences between a teacher, principal and another specialist who has seen the child (psychologist, nurse, vision, or speech consultant, etc.). A check should be made with the individual parties before any decision is voiced.

Working Relationship Only when there is complete understanding between the classroom teacher and the learning disabilities specialist can this program be effective. The classroom teacher must accept the specialist as a friend and a source of help, and not view them as another dictatorial person sent to their classroom to add more 'work' to their already impossible overcrowded classroom and schedule. This takes time and is probably one of the major areas of operating a successful itinerant learning disabilities program. Teachers are weary of sending a referral and having their words sent back to them with no suggestions of how to deal with the problem. The itinerant learning disabilities specialist will not only give directions of coping with the problem, but supply materials, instruction and ego support to the child and teacher. The specialist cannot, however, direct how this program can be executed. The classroom teacher must decide how it will be possible to carry out the suggestions and programs provided. For maximum effectiveness, the school district must provide some type of help in this area and utilize classroom aides or other district personnel to assist the teacher. The itinerant teacher then makes periodic checks with the classroom teacher as to the progress and effectiveness of the program and makes any changes necessary to facilitate maximum efficiency.

Efficiency of Service The itinerant learning disabilities specialist can only perform to any degree of satisfaction to the school district when there is complete understanding between the specialist and the district personnel as to the type of service that is wanted.

If the district wishes identification and diagnosis of the children in the schools, then the specialist's role becomes mainly one of an educational tester. Programming at this point can only be sparce and follow-up with the classroom teacher cannot be as intensive as might be necessary. If the district wishes service for children in the classroom then testing and diagnosis must be kept to a minimum. The guidance and psychological department can gather information for the specialist and leave them free to actively work with the teacher and the child. A close communication with the guidance and psychological staff is needed in this case, and agreement as to what assessments will be most effective. Agreement should also be carefully outlined for further referral of a child to sources necessary to fully evaluate the child. Other areas being vision, language, speech, psychological and parental. In the case of parental help, it should be the district's responsibility to obtain and follow up any necessary help or therapy from the parents.

Caseload It is estimated that the itinerant learning disabilities specialist can handle a caseload of 50 to 110 pupils through supportive service to the teacher. The exact caseload is impossible to determine because of the variability encountered in the children, school districts, and school district program and services.

Suggested Procedure

Ideally, the itinerant program should work out in this order. A meeting with district personnel, elementary supervisor, psychologist, guidance, nurse, reading specialist, principals and the itinerant learning disabilities specialist to explain the program, and designate one person to coordinate the program for that district. The guidance department with cooperation from the psychological department, is usually the most satisfactory arrangement. The next step is to hold inservice meetings with the teachers in the individual schools and instruct them about the type of child eligible for service. Many films are available for this purpose, perhaps the best or most effective one is a film "EARLY IDENTIFICATION OF LEARNING DISABILITIES" available from National Audio Visual Center, General Services Administration, Washington, D.C. Only when the teachers have some idea of the type of child you are working with, can this program servive.

## Conclusion

The itinerant learning disabilities personnel can be of great service to a school district if properly utilized. It is not, however, the total answer, nor is it in itself a total program. It cannot function nor survive without the full-time or resource programs. There will always be those children who will need full-time or part-time help. The itinerant program is designed to help those students in the regular classroom who need a little extra and specialized help. Ideally, one itinerant person for each district or perhaps two districts, if they are small, is the best approach. It is neither efficient nor effective to expect one or two consultants to cover an entire intermediate unit unless there is the full range of programming in each district. The itinerant program has provided a good beginning in the past three years. District administrators and classroom teachers are aware of the existing problems and are working toward better programming for ALL students.

## ITINERANT SUPPORTIVE SERVICE

## PART II - PREVENTION PROGRAM

The more experience the learning disabled child has with school, the more failure he experiences. Therefore, the older he is when remediation is begun, the more difficult remediation becomes, since constant failure is damaging to his self image (ego) and results in his rejection of school activities.

The implications are twofold: 1) remedial activities should be employed before children become involved with formal (academic) learning experiences, and 2) formal academic activities should be delayed until after sufficient experience with remedial activities. If these two implications are heeded then remediation is not remediation but prevention.

The objectives of the prevention program are:

1. To structure early school experiences for success in order to reduce the negative attitudes that many children, and especially learning disabled children, have toward formal education.
2. To capitalize on the learning media which is most efficient for the young child, movement and manipulation, as opposed to the more abstract media of reading and writing.
3. To teach the child concepts through the use of real experiences rather than only through verbal and visual materials.
4. To develop such perceptual and (sensory) perceptual-motor skills, competencies, and concepts as may be prerequisites to efficient subsequent academic learning.
5. To provide instruction in such sequential small steps as may be needed by individual children to become competent in a given area.

These objectives are believed to be consistent with the multi-sensory approach to learning, the concepts of child development and ego enhancement. For example:

We can teach a child to read a word but this does not imply that he has the concept of the word. The word _under_ can be taught to the child through visual clues, but his understanding and use of the concept will be limited until the concept is meaningful to him. If we make the concept meaningful to the child (through successful multi-sensory experiences with the concept), he will retain the concept since it is a part of him rather than just an abstraction. In addition it is believed that the exuberance of success combined with the exhilaration of movement create an effective and enjoyable learning climate. Should learning not be a joyous experience?

More specific program objectives are indicated below along with their relation to school success.

1. _Gross Motor Coordination_
   - Balance
   - Locomotor Skills
   - Sequencing and synchronization of movements of body parts
   - Sports skills (specific)

   _Relation to School Success_
   - a) Learning experiences
   - b) Functions of the brain as in reading
   - c) Control of body mobility
   - d) Goal directed activities which provide immediate feedback
   - e) Can be structured to relate reality to abstraction or for ego enhancement

2. _Body image, laterality, directionality_

   Awareness of the parts of the body, its planes and sides, right and left and the projections of these concepts into space.

   _Relation to School Success_
   - a) Following directions
   - b) Locating objects in space
   - c) Giving directions
   - d) Organizing the printed page well enough to avoid errors of reversal

3. Hand-eye coordination
    - Catching
    - Throwing
    - Striking or redirecting an object
    - Cutting
    - Pasting
    - Handling tools

    Relation to School Success
    - a) Handwriting
    - b) Being able to use writing as a means to learn or reinforce reading
    - c) Ocular control necessary for reading
    - d) Learning to attend to a task

4. Motor Planning and Visualization

    The ability to foresee the results of an action, or the ability to perform an action from a symbolic description

    Relation to School Success
    - a) Following directions
    - b) Reading comprehension
    - c) Number concepts

5. Language Development through Movement Activities

    Using actual reality - experiences - to teach language concepts such as having the child jump in and out of a tire while he verbalizes "in" and "out" as he jumps.

6. Verbalization - used throughout the program in order to:

    1) relate concrete and abstract
    2) increase feedback
    3) to increase confidence in shy children

Operational Procedure - Guidelines for Prevention Program

Purpose

1. To provide information, demonstrations and training in basic perceptual-sensory-motor activities to earliest primary level classes.

2. To identify those children with the more severe coordination and perceptual deficits who may be potential learning disabled children.

3. To provide training in small groups for those children who have been identified.

Participation

1. Participation in program should be upon the interest and request of the individual classroom teacher on a voluntary basis.

2. It is assumed that those teachers who elect to participate will carry on a daily program of 10 - 20 minutes with their classes.

3. Provisions should be made by the district for personnel to continue the work begun by the County specialist (described below) in guiding and planning daily programs for small groups, such as, physical education and/or reading personnel, and for personnel to carry out those training activities on a daily basis (aide, volunteers, etc.)

Role of Sensory-Motor Specialist

1. Through weekly demonstration lessons the classroom teacher will be familiarized with the techniques of sensory-motor training. She will then carry out the program with her class on a daily basis until the specialist returns to demonstrate a subsequent lesson.

2. Provide and demonstrate a screening procedure to identify the children with the more severe motoric and/or perceptual problems who will receive special help in small groups. The teacher will do the actual evaluation with the guidance of the specialist.

3. The specialist will then work with the district specialist to familiarize him with 1) indepth evaluation techniques, and 2) training methods to be used with the small group. Through the efforts of both specialists initially, a person should be trained to implement the prescribed daily training activities.

4. When classroom teachers and district specialist(s) are ready, the County specialist will phase out of the program to an on-call status.

Only classes in which teachers have voluntarily elected to participate are included in the program. This procedure was established because for the program to be effective for either the teacher or the children, it is necessary for the teacher to conduct the demonstrated activities daily.

It was also decided that the major emphasis would be on movement activities as opposed to desk top manipulative and perceptual activities since teachers already do a considerable, if not disproportionate amount of desk top activities even though some may be inappropriate. Because of the emphasis on movement, efforts have been made to include and involve the physical educators as the local coordinators and resource people for this program. In approach, the program combines perceptual-motor training and movement exploration techniques with skill teaching being limited as much as possible to the small remedial groups.

While it is recognized that for such a program to be ultimately successful, it will be necessary to take the child from where he stands - in progressive steps - to the door of academics. The immediate need then is to create an awareness and sell the concept of these first vital steps. Evaluation of the program for this year will be in terms of teacher acceptance and participation.

The activities that are demonstrated initially for the classroom teacher are designed to be used with an entire class, in the classroom, with a minimum of equipment and maximum participation. This approach effectively illustrates to the teacher the feasibility of the program. This approach, however, while it may raise the mean of the class, also increases the variability. The "good learners" improve quicker than the "poor learners" and so the latter give the appearance of regressing. It is therefore necessary to identify poor learners - these are often the children defined as immature by the teacher - and give them extra help in small groups. These are the children for whom the program is designated to be of proper service. A list of symptoms of such children follows:

## QUICK SCREEN FOR IDENTIFICATION OF LEARNING DISABLED CHILDREN

_______ Average intellectual ability

_______ Cannot perform a variety of age appropriate motor skills

_______ Generally clumsy or awkward

_______ Rigidity in gross or fine movement

_______ Poor fine motor coordination (crayon, scissors, pencil)

_______ Does not use both sides of body

_______ Cannot follow directions

_______ Generally disoriented in space and time

_______ Poor body image (does not know parts)

_______ Cannot match shapes or colors

_______ Difficulty with activities of daily living

_______ Hypo or hyperactive

_______ Inattentive or disinterested

_______ Distractable

_______ Cannot adapt to shift of activities

_______ Poor sequential memory

_______ Poor or immature expressive language

_______ Difficulty with immediate visual or auditory memory

_______ Personal belongings disorganized or frequently lost

_______ Does not know common opposites

_______ Cannot pick the one that is different

A few of these small remedial groups have been started. In most cases they are developing according to plan. They are administered in a variety of ways according to the unique structure in each school district. At this point commitment rather than skill seems to be the most important factor.

The difficulties encountered so far are indicated below:

1. Teachers claim that they have no time to do activities. Complaint is that curriculum is already too full with academic activities (in kindergarten) to permit time for programs.
2. In spite of what they could contribute to the program, many of the physical education personnel are reluctant to work with the young children especially in the remedial groups. Some just have too full a schedule. Where they are willing and do the job, the program reaches maximum effectiveness.
3. Many programs will fail because the program was imposed by zealous administrators upon unreceptive teachers who did not elect to take part. It is better to work with one receptive and enthusiastic teacher in a building and she will convince the others if they are to be sold.

It is felt that this program has tremendous potential for making a brighter tomorrow for children. It is new and different and it takes concerted effort. We cannot, at this time, predict full acceptance nor success, however, we know that some children who could be successful fail under the present system. This is one alternative.

NUMBER OF CHILDREN NEEDING SERVICE

READINESS FOR PROGRAM ESTABLISHMENT

VARIETY of PROGRAMS FEASIBLE

QUALITY PROGRAMS AND PROJECTED COSTS

# CHAPTER III

## SUGGESTIONS FOR STARTING PROGRAMS

In starting new programs for the learning disabled, certain points must be considered.

a) There must be not only a recognized need for the program but also a readiness by the school system and community to be committed to a viable program. This can be implemented through a variety of in-service programs.

b) A complete program of services for all pupils with special needs cannot be implemented at once, therefore a multi-year plan should be designed.

c) In implementing each program phase, emphasis should be on quality.

If the personnel in the school district have very little experience in this specialized programming, it is suggested that:

a) Begin with a special class to gain experience with full-time programming with this type of child and to institute training of all concerned (teachers, supervisors, support personnel)

b) Part time services should be started after experience in special classroom is gained preferably using the experienced special classroom teacher. Locate this teacher near the special classroom so they can be complementary instructional partners. This part time may be half-day programming per child, or a resource room type of service.

c) Consider only an experienced teacher in one of the previous programs as a candidate for an itinerant supportive teacher.

All programs established should be a part of a specially designed program that also includes prevention services so that at some stage services can be leveled off.

The following treatment of information regarding costs and program projections are based on experiences regarding the Bucks County population, but may serve as a generalized guide for estimating service needs if extrapolated for your designated area:

## PROJECTING PROGRAM NEEDS

The extent and sophistication of professional services and variety of supportive programs offered will aid in determining whether a program should be started in a school district.

Charted below is information used to project program needs in Bucks County. Within the two percent of the elementary population needing service, the chart reflects that half need specialized daily intervention (part or full-time) and the other fifty percent can be aided in the regular classroom through itinerant supportive services.

| No. of Elem Pupils | Predicted No. of pupils needing service (2%) | Number of Pupils needing program service | | | Number of program needs | | |
|---|---|---|---|---|---|---|---|
| | | Full-time Class | Resource Room | Itinerant Supportive | Full time class | Resource Room | Itinerant Master Teacher |
| 1000 | 20 | 4 | 6 | 10 | | | 1/8 |
| 2000 | 40 | 8 | 12 | 20 | | 1 | 1/4 |
| 2500 | 50 | 10 | 16 | 24 | 1 | 1 | 1/4 |
| 3000 | 60 | 12 | 20 | 28 | 1 | 1 | 1/3 |
| 5000 | 100 | 18 | 35 | 40 | 2 | 2 | 1/2 |
| 10000 | 200 | 36 | 70 | 80 | 4 | 4 | 1 |

The above chart is but a general guide based on averages per district in Bucks County. Number of pupils needing service in different districts varies with each district.

Experience has shown that a school district needs approximately 2500 pupils on the elementary level before adequate program service can be facilitated efficiently. Even though there may be enough pupils when enrollment is below 2500, the group probably has too wide an age range and varieties of disabilities to offer an optimal program service. Under these conditions one school district might agree to take a child from an adjoining district on a tuition basis, or an intermediate unit might offer services to these pupils.

The itinerant master teacher column is charted proportionately to full time service per professional needed for teacher support according to district size. The variety of tasks performed by the master teacher indicates that this person should have a high degree of training and experience and probably can more feasibly be of service to several districts through an intermediate unit.

The above report by no means indicates that these programs and approaches should be followed in any particular district. Many approaches and combination of programs are possible. At present in Bucks County one school district offers the variety of approaches referred to above and one school district is implementing an alternate comprehensive approach.

## COST EXPERIENCE FACTORS FOR ALTERNATE PROGRAM SERVICES IN BUCKS COUNTY

Projected average program costs

FULL-TIME CLASS - serves 8 pupils

| | |
|---|---|
| Salaries & Fixed charges (teacher and aide) | $15,000. |
| Supplies and equipment | 1,200. |
| Supervision | 1,000. |
| Rental (Classroom-furnished services & utilities) | 1,400. |
| Professional supportive services | 2,000. |
| Miscellaneous expenses | 1,000. |

$21,600 ÷ 8 pupils

Cost per pupil - $2,700.
+ transportation costs

RESOURCE ROOM - Serves an average of 18 pupils for 1/3 of school day for each child.

Costs are approximately same except for an additional $600. for wider range of supplies and equipment needed for additional pupils.

$22,000 ÷ 18 pupils

Cost per pupil - $1,233.
+ transportation costs
+ regular class costs

ITINERANT MASTER TEACHER SUPPORTIVE SERVICE - Serves an average of 80 pupils through helping the regular class teacher help the child

| | |
|---|---|
| Salary & fixed charges | $10,900. |
| Supplies & equipment | 1,800. |
| Supervision | 1,000. |
| Rental - office & storage | 600. |
| Professional Supportive services | 700. |
| Travel expenses | 800. |
| Miscellaneous expenses | 200. |

$16,000 ÷ 80 pupils

Cost per pupil - $ 200.
+ regular class costs

## Some basic Tenents, Reflections and Observations

1. Use reluctance in labeling a child unless by that label you can provide a better program for him than he is now receiving.
2. Because a child has an identifiable learning problem is no reason to necessarily remove him from his present classroom setting.
3. Each child has some strengths. He's learned something no matter at what stage we find him, capitalize on his strengths.
4. Each child has a learning style - let's find the approach that he seems to prefer.
5. It is just as important that the normal child be exposed to the atypical child, as vice versa.
6. Poor learning may be a symptom of poor teaching.
7. Recognize that the great majority of children can be served in a public school educational setting. There are a few children whose primary development problem may not be educational, or of such nature that they may be better served in a setting other than a public school.
8. No one is an expert in all dimensions of learning and child development. The security of a teacher can be judged somewhat on her ability to use additional support personnel for the children in her classroom.
9. Establish programs in schools with dynamic principals. The building principal sets the tone for all educational programs within the building.

10. Special Education cannot solve all problems of all children with educational handicaps. It is the responsibility of both General Education and Special Education. Itinerant support personnel can help bridge this cooperative and responsibility function.
11. In order to help the child develop efficiently both horizontally and vertically, there must be a variety of materials available to the teacher ranging from the grossly manipulative to the abstract.
12. Quality education does not occur without full scale commitment. Quality education demands the full resources of the community.

# APPENDICES

# APPENDIX A

# PROCEDURE FOR PROGRAM PLACEMENT

BUCKS COUNTY PUBLIC SCHOOLS

## PROCEDURE FOR PROGRAM CONSIDERATION

## LEARNING DISABILITIES (MINIMAL BRAIN DAMAGE) PROGRAM

| | BY | DATE |
|---|---|---|
| 1. Characteristics of the child indicate that educational development is or will be atypical | ______ | ______ |

(Check areas of major problem)
The identifying characteristics of pupils eligible for service may include some of the following among others:

___ a) hyper-activity and distractability,
___ b) language development deficits (auditory perception, memory, discrimination, sound blending and expressive deficits),
___ c) visual developmental deficits (visual discrimination, memory, perception, eye teaming and other visual developmental deficits),
___ d) orientation problems (time, size, sequence, laterality and directionality deficits),
___ e) non-specific awkwardness, clumsiness and fine motor incoordination, and
___ f) ego developmental problems,
___ g) other______________________

| | BY | DATE |
|---|---|---|
| 2. Report by (a) Neurologist and | ______ | ______ |
| (b) Psychiatrist and/or Psychologist that the child needs special educational adjustments | ______ | ______ |
| 3. Indications that child has at least average intellectual potential | ______ | ______ |
| 4. Educational assessment of child's abilities, disabilities | ______ | ______ |
| 5. Indication that learning problem<br>(a) isn't due to an orthopedic, sensory or emotional handicap that could be served in another program<br>(b) cannot be adequately helped in a typical remedial program (e.g. remedial reading) | ______ | ______ |
| 6. Indication of parent cooperation, including agreement to obtain supportive therapy, medical assistance, or additional examination if recommended | ______ | ______ |

---

**TYPE OF PROGRAM**

Preventive______Itinerant supportive______Resource Room______Special Class______

Other______________________

NAME______________________DATE____________BY______________________

# APPENDIX B

# CLASSROOM ANALYSIS OF THE CHILD WITH LEARNING DISABILITIES

- - - - - - - - - -

## A DEVELOPMENTAL APPROACH

# OVERVIEW OF DESCRIPTIVE DIMENSIONS

## PHYSICAL DEVELOPMENT

Motor functioning, physical characteristics, physical handicaps

## CONTROL AND REGULATION DEVELOPMENT AS RELATED TO ATTENTION

Hyper or Hypoactivity, Distractibility, Impulsivity, Perseveration, Disinhibition

## INTEGRATIVE DEVELOPMENT

Perception and Coordination - Global orientation, gross motor coordination, fine motor coordination, visual, auditory, taste, smell, kinesthetic, tactile.

## SELF-CONCEPT - EGO FUNCTIONING - PERSONALITY DEVELOPMENT

Relationship capacities, variation in personality, emotional characteristics, character of social behavior.

## LANGUAGE DEVELOPMENT

Auditory discrimination, auditory memory, sound blending, verbal encoding, verbal decoding, speech development vocabulary, comprehension

## LEARNING DEVELOPMENT

Academic achievement and adjustment, thinking processes, attention-concentration.
Special Learning Disabilities

KEY:
0 - No problem
1 - No problem in most instances
2 - Problem - still evident but controllable, and/or significant improvement is continuing
3 - Problem - still in the direction of a major problem but some improvement noted
4 - Major problem

## PHYSICAL DEVELOPMENT

| | 0 | 1 | 2 | 3 | 4 | |
|---|---|---|---|---|---|---|
| MOTOR FUNCTION | | | | | | |
| 1. Frequent choreform movement of extremities | | | | | | |
| 2. Rigid in movement of extremities | | | | | | |
| 3. General clumsiness or awkwardness | | | | | | |
| 4. Frequent tics or grimaces | | | | | | |
| 5. Other | | | | | | |
| PHYSICAL CHARACTERISTICS | | | | | | |
| 1. Thumb sucking, nail biting, teeth grinding, rocking, etc. | | | | | | |
| 2. Peculiar habits (eating, sleeping, etc.) | | | | | | |
| 3. Easy Fatigability | | | | | | |
| 4. Poor Posture | | | | | | |
| 5. Flaccid (Floppy, rag-doll type of limp body movements) | | | | | | |
| 6. Overweight or underweight | | | | | | |
| 7. Oversized or undersized for age | | | | | | |
| 8. Health Problem (specify) | | | | | | |
| 9. other | | | | | | |

## PHYSICAL DEVELOPMENT

| PHYSICAL HANDICAPS (Specify) | 0 | 1 | 2 | 3 | 4 | |
|---|---|---|---|---|---|---|
| 1. Extremities | | | | | | |
| 2. Vision | | | | | | |
| 3. Hearing | | | | | | |
| 4. Other | | | | | | |
| SUMMARY and/or Suggestions | | | | | | |

| CONTROL AND REGULATION | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| 1. DISTRACTABILITY | | | | | |
| 2. PERSEVERATION | | | | | |
| 3a HYPERACTIVITY<br>3b HYPOACTIVITY | | | | | |
| 4. DISINHIBITION | | | | | |
| 5. IMPULSIVITY | | | | | |

## SENSORY INTEGRATION (PERCEPTION AND COORDINATION)

| | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| 1. Impaired discrimination of size<br>a) visual discrimination of gross differences<br>b) " " " fine "<br>c) verbalization of size discrimination<br>d) memory of size discrimination<br>e) graphic production in relation to size | | | | | |
| 2. Impaired discrimination of shape and form<br>a) visual discrimination of gross differences<br>b) " " " fine "<br>c) verbalization of shape and form discrimination<br>d) memory of shape and form discrimination | | | | | |
| 3a. Impaired visual perception of spacial relationships (Frostig)<br>3b. Impaired production in spacial activities | | | | | |
| 4. Impaired discrimination of directionality (right, left - up, down - before, behind, etc.)<br>a) visual discrimination<br>b) verbal discrimination<br>c) memory<br>d) graphic production<br>e) kinesthetic production | | | | | |
| 5. Impaired discrimination of sounds<br>a) gross sound discrimination<br>b) fine sound discrimination<br>c) verbal auditory discrimination<br>d) production of sound discrimination<br>e) production of verbal discrimination | | | | | |
| 6a. Impaired orientation in time<br>6b. Impaired orientation of sequence | | | | | |
| 7. Impaired judgment of distance | | | | | |
| 8. Impaired body perception of<br>a) body awareness (Frostig) (Kephart)<br>b) body image<br>c) body concept<br>d) body schema | | | | | |
| 9. Impaired discrimination of figure-ground<br>a) in environment<br>b) in pictures<br>c) on printed pages | | | | | |

## SENSORY INTEGRATION (PERCEPTION AND COORDINATION)

| | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| 10. Impaired discrimination of part-whole | | | | | |
| 11. Impaired gross motor coordination<br>a) balance<br>b) postural flexability - Kephart | | | | | |
| 12. Impaired fine motor coordination (eye-hand coordination)<br>a) graphic<br>b) cutting<br>c) stringing beads | | | | | |
| 13. Ocular control (Kephart) | | | | | |
| 14. Other | | | | | |
| SUMMARY and/or Suggestions | | | | | |

## SELF CONCEPT - EGO FUNCTIONING - PERSONALITY DEVELOPMENT

| RELATIONSHIP CAPACITIES | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| 1. Peer group relationships generally poor<br>a) at play<br>b) school tasks | | | | | |
| 2. Overexcitable in normal play with other children | | | | | |
| 3. Better adjustment when playmates are limited to one or two | | | | | |
| 4. Frequently poor judgment in social and interpersonal situations | | | | | |
| 5. Socially bold and aggressive | | | | | |
| 6. Attempts to manipulate others - power struggle (Indicate same or opposite sex when significant)<br>a) peers<br>b) teacher<br>c) aide<br>d) adults<br>e) other | | | | | |
| 7. Inappropriate, unselective, and often excessive displays of affection<br>a) peers<br>b) teacher<br>c) aide<br>d) adults<br>e) other | | | | | |
| 8a. Difficulty in displaying affection<br>8b. Difficulty in accepting affection | | | | | |
| 9. Easy acceptance of others alternating with withdrawal and shyness | | | | | |
| 10. Excessive need to touch, cling, and hold on to others | | | | | |

## SELF CONCEPT - EGO FUNCTIONING - PERSONALITY DEVELOPMENT

| | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| VARIATIONS OF PERSONALITY | | | | | |
| 1. Overly gullible and easily led by peers and older youngsters | | | | | |
| 2. Frustration reactions<br>a) rage reactions<br>b) tantrums<br>c) crying<br>d) pouting<br>e) other | | | | | |
| 3. Very sensitive to others<br>a) generally<br>b) generally insensitive to others<br>c) generally indifferent to others | | | | | |
| 4. Excessive variation in mood and responsiveness | | | | | |
| 5. Poor adjustment to environmental changes | | | | | |
| 6. Sweet and even tempered, cooperative and friendly | | | | | |
| 7. Symptoms of anxiety (specify) | | | | | |
| EMOTIONAL CHARACTERISTICS | | | | | |
| 1. Impulsive | | | | | |
| 2. Poor emotional and impulse control | | | | | |
| 3. Explosive | | | | | |
| 4. Low tolerance for frustration | | | | | |
| 5. Reckless and uninhibited; impulsive then remorseful | | | | | |
| 6. Withdrawn | | | | | |
| 7. Other | | | | | |

## SELF CONCEPT - EGO FUNCTIONING - PERSONALITY DEVELOPMENT

|  | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| CHARACTERISTICS OF SOCIAL BEHAVIOR |  |  |  |  |  |
| 1. Social competence frequently below average for age and measured intelligence |  |  |  |  |  |
| 2. Behavior often inappropriate for situation |  |  |  |  |  |
| 3a. Generally negative and aggressive to authority<br>3b. Generally overly submissive to authority |  |  |  |  |  |
| 4. Antisocial behavior (lying, cheating, sneaky) |  |  |  |  |  |
| 5. Flight from challenge |  |  |  |  |  |
| 6. Over-compensatory actions (specify) |  |  |  |  |  |

SUMMARY and/or Suggestions

## LANGUAGE DEVELOPMENT

| | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| AUDITORY DISCRIMINATION-GROSS SOUNDS | | | | | |
| 1a. Can make the distinction between highly different sounds, (drum, bell, horn) | | | | | |
| 1b. Can identify familiar sounds (knocking on the door, clapping hands, etc. | | | | | |
| 1c. Can identify groups of sounds (house sounds, animal sounds, weather sounds, etc.) | | | | | |
| SPEECH SOUND DISCRIMINATION | | | | | |
| 2a. Can identify whether two sounds are the same or different. | | | | | |
| 2b. Can identify whether two syllables are the same or different. | | | | | |
| 2c. Can identify whether two words are the same or different. | | | | | |
| 2d. Can identify rhyming elements or words | | | | | |
| 2e. Can identify sounds as to their position in a word | | | | | |
| 2f. Can make sound-symbol associations | | | | | |
| AUDITORY MEMORY | | | | | |
| 1. Can recall immediately the digits heard | | | | | |
| 2. Can recall immediately the vowels heard | | | | | |
| 3. Can recall immediately the consonants heard | | | | | |
| ASSIMILATION | | | | | |
| 1. Can blend isolated sounds to make words | | | | | |
| 2. Can blend words to make phrases or sentences | | | | | |
| 3. Intonation is characteristic of our language | | | | | |
| VERBAL ENCODING | | | | | |
| 1. Can describe objects | | | | | |
| 2. Can create stories | | | | | |
| 3. Can verbally describe activities for peer groups | | | | | |
| VERBAL DECODING | | | | | |
| 1. Can comply with verbal directions | | | | | |
| 2. Can retail paragraphs or stories | | | | | |
| 3. Can answer questions about paragraphs or stories | | | | | |

## LANGUAGE DEVELOPMENT

| | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| SPEECH DEVELOPMENT | | | | | |
| 1. Can articulate with good intelligibility | | | | | |
| 2. Hearing vocabulary is normal for age level | | | | | |
| 3. Speaking vocabulary is normal for age level | | | | | |
| 4. Sentence length is normal for age level | | | | | |
| 5. Sentence structure is grammatically correct | | | | | |
| 6. Sentence complexity is normal for age level | | | | | |
| VOICE DEVELOPMENT | | | | | |
| 1. Pitch is normal for age and sex | | | | | |
| 2. Rate is normal for age and sex | | | | | |
| 3. Loudness is normal for age and sex | | | | | |
| 4. Quality is normal for age and sex | | | | | |
| SPEECH MECHANISM DEVELOPMENT | | | | | |
| 1. Has good general awareness of articulators | | | | | |
| 2. Has good general awareness of articulator function | | | | | |
| 3. Has normal diadochokinetic rate | | | | | |
| 4. Has normal physical development of articulators | | | | | |

## LEARNING DEVELOPMENT

| | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| **ACADEMIC ACHIEVEMENT AND ADJUSTMENT** | | | | | |
| 1. Reading disabilities | | | | | |
| 2. Arithmetic disabilities | | | | | |
| 3. Spelling disabilities | | | | | |
| 4. Poor<br>a) printing<br>b) writing<br>c) drawing ability | | | | | |
| 5. Frequent perceptual reversals in reading and writing letters and numbers | | | | | |
| 6. Variability in performance from day to day or even hour to hour | | | | | |
| 7. Poor ability to organize work | | | | | |
| 8a. Slowness in finishing work<br>8b. Hurries work consequently makes many errors | | | | | |
| 9. Frequent confusion about instructions<br>a) oral<br>b) written | | | | | |
| **DISORDERS OF THINKING PROCESSES** | | | | | |
| 1. Poor ability for abstract reasoning<br>a) oral<br>b) written | | | | | |
| 2. Needs concrete presentations | | | | | |
| 3. Difficulties in concept-formation | | | | | |
| 4. Thinking frequently disorganized | | | | | |

## LEARNING DEVELOPMENT

| | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| 5. Poor<br>a) short term memory<br>b) long term memory | | | | | |
| 6. Frequent thought perseveration | | | | | |
| 7. Difficulty in making generalizations<br>a) oral<br>b) written | | | | | |
| 8. Other | | | | | |
| DISORDERS OF ATTENTION AND CONCENTRATION<br>1. Short attention span for age | | | | | |
| 2. Overly distractible for age | | | | | |
| 3. Impaired concentration ability | | | | | |
| 4. Motor or verbal perseveration | | | | | |
| 5. Impaired ability to make decisions, particularly from many choices | | | | | |
| 6. Other | | | | | |

SUMMARY and/or suggestions

## SUMMARY OF OBSERVATION AND EVALUATION

NAME______________________________ DATE____________ PRESENT AGE____________

| NEED AREAS | COMMENTS and/or SUGGESTIONS |
|---|---|
| Physical | |
| Control and Regulation | |
| Self Concept-Ego-Personality | |
| Language | |
| Learning | |
| Integrative | |

## OTHER SIGNIFICANT INFORMATION (Date each entry)

1. Developmental History

2. Medical

3. Psychological

4. Family Relationship

5. Other

Task Levels (Check)
Primary________
Acceptance________
Order________
Explanatory________
Relationship________
Mastery________
Achievement________

# APPENDIX C

## EGO DEVELOPMENT MILESTONES

## LINES OF EGO DEVELOPMENT
## DISTINCT PSYCHIC SECTORS AND STRESSES, THEIR CONTINUITY AND CUMULATIVE CHARACTER

| I<br>PLAY WORK<br>FROM BODY TO PLAY AND WORK | II<br>SOCIALIZATION<br>FROM EGOCENTRICITY TO COMPANIONSHIP | III<br>BODY MANAGEMENT | IV<br>OBJECT RELATIONS<br>DEPENDENCY TO INDEPENDENCY |
|---|---|---|---|
| 1. Erotic pleasure | 1. Selfish, Narcissistic | 1. Mother's cathexis of infant | 1. Biological unity |
| 2. Transient objects | 2. Treats other children like lifeless objects | 2. Due to pain barrier aggression is turned out | 2. Part object |
| 3. Inanimate objects | 3. Children as helpmates (short lived relation) | 3. Increase in narcissistic cathexis of body and reality testing is aware of dangers | 3. Stage of object constancy |
| 4. Play material | 4. Children as partners on equal basis | 4. Right to take risks expecting parents to protect and restore (adolescence) | 4. Ambivalent relationship |
| 5. Interest in the finished product | | 5. Endorsement of safety and medical rules | 5. Object centered (oedipal phase) |
| 6. Ability to work | | | 6. Latency period |
| | | | 7. Pre-adolescence (returned to ambivalence) |
| | | | 8. Adolescent struggle |
| | | | 9. Maturity |

Based on Anna Freud's book "Normality & Pathology in Childhood" -
by Carlos T. Robles, M.D.

## APPENDIX D

## DAILY STUDENT SUMMARY PLAN

BUCKS COUNTY PUBLIC SCHOOLS
ACTIVITY SCHEDULE

Name________________________
Date________________________

VISUAL ____________________ ____
____________________ ____
____________________ ____
____________________ ____

Perception
Integrative
Motor

LANGUAGE ____________________ ____
____________________ ____
____________________ ____
____________________ ____

Perception
Integrative
Expression

MOTOR ____________________ ____
____________________ ____
____________________ ____
____________________ ____
____________________ ____

Balance
Rhythm
Coord-Gross
Fine

DIRECTIONALITY
ORGANIZATION
EGO DEVELOPMENT

____________________ ____
____________________ ____
____________________ ____
____________________ ____
____________________ ____
____________________ ____

Self-Image
Time-Space
Sequencing

DEVELOPING FUND
OF INFORMATION

____________________ ____
____________________ ____

OTHER____________________ ____
____________________ ____

READING ____________________ ____
____________________ ____
____________________ ____

SPELLING ____________________ ____
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WRITING ____________________ ____
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MATH ____________________ ____
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ARTS ____________________ ____
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MUSIC ____________________ ____
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SOCIAL
STUDIES ____________________ ____
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SCIENCE ____________________ ____
____________________ ____
____________________ ____

OTHER____________________ ____
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# APPENDIX E

# SCREENING MEASURES USED BY ITINERANT PERSONNEL

# SCREENING MEASURES USED BY ITINERANT PERSONNEL

## Major

I. Teachers Observation Scale

II. Detroit test of Learning Aptitude

1. Memory for Designs
2. Auditory Attention Span for Unrelated Words
3. Visual Attention Span for Objects
4. Motor Speed and Precision
5. Oral Directions

III. Illinois Test of Psycholinguistic Abilities

1. Sound Blending
2. Auditory Closure

IV. Purdue Perceptual Motor Survey - Selected items

## Supplementary

Goodenough Draw-A-Man Test

Detroit Test
- a) Auditory Attention Span for Related Syllables
- b) Verbal Absurdities
- c) Others as needed

Chicago Non-Verbal Exam.

Peabody Intelligence

Gross Motor and Fine Motor Screening from various scales

Wepman Auditory Discrimination

Beery - Buktenica Visual Screening

Benton - Visual Motor Screening

Buttonwood Basic Motor Fitness Test

# APPENDIX F

## TEACHER OBSERVATION FORM

# TEACHER OBSERVATION FORM
# FOR
# CHILDREN DISPLAYING A LEARNING DISABILITY

The following items relate to learning progress. Separation into categories does not mean that the observation item relates only to that category - inter-correlations are high but the categories are selected because of the heavy loading in a specific area for which developmental or remedial techniques can be designed. Not all of the symptoms will be found in one child and no universal symptom is found in all children with learning disabilities. Typical children who have no significant loss of learning may show some of the symptoms, therefore this form in and of itself is not to be construed as a diagnostic instrument, but only as an aid to diagnosis and remediation.

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KEY - 0 - Not significantly different from the majority of students of same age or grade level

1 - Problem - but infrequent or inconsistent

2 - Problem - consistent or frequent

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## MOTOR DEVELOPMENT

1. Awkward in running and climbing ______________
2. Awkward balance - standing on one foot, walking on line or low rail ______________
3. Rigid movements ______________
4. Flaccid (limp body movements) ______________
5. Lacks smoothness in walking up and down steps ______________
6. Difficulty with hopping and skipping ______________
7. Difficulty learning movements and movement sequences in games ______________
8. Lacks smoothness in clapping, tapping, etc. in rhythm ______________
9. Poor posture ______________
10. Easily fatigued ______________
11. Difficulty in cutting, pasting, coloring ______________

12. Holds chalk, crayon and pencil awkwardly ______________

13. Strokes with pencil too heavily or lightly ______________

14. Works very slowly on simple pencil-paper tasks ______________

### VISUAL PERCEPTION (Interpreting visual stimuli)

1. Difficulty in matching (interpreting likenesses) color form, shape, size. ______________

2. Difficulty in discriminating differences - color, form, shape, size ______________

3. Difficulty in recognizing what is missing ______________

4. Attention focused on irrelevant detail ______________

5. Confusion with foreground-background ______________

6. Frequently loses place on work-page ______________

7. Difficulty with visual memory (recalling what was seen) ______________

8. Difficulty in interpreting reversible letters or words ______________

### VISUAL MOTOR (Production related to visual stimuli)

1. Must feel things or run fingers over page before reacting ______________

2. Difficulty in assembling simple puzzles ______________

3. Difficulty staying on line or within boundary lines ______________

4. Poor orientation of drawings on page ______________

5. Poor spacing of drawing or writing ______________

6. Difficulty in making simple forms ______________

7. Difficulty in reproducing simple pattern or design ______________

8. Cramped or sprawled writing ______________

9. Reverses or rotates angles, letters or words ______________

SPACIAL ORGANIZATION (Laterality, directionality, time, space)

1. Disoriented in room, building and playground ____________
2. Untidy with clothing, desk, papers ____________
3. Inconsistent hand preference ____________
4. Confusion of left - right ____________
5. Poor knowledge of body parts ____________
6. Confusion with directionality (near-far, front-behind, above-below, big-bigger-biggest) ____________
7. Has to feel or look at chair before sitting ____________
8. Reaches too far or too short for things ____________
9. Holds hands in wrong position for catching ____________
10. Reacts too quickly or slowly to moving stimuli (like a ball thrown to him) ____________
11. Disoriented in time ____________
12. Misjudges distances in play and work activities ____________
13. Difficulty with sequence ____________

REGULATION BEHAVIOR

1. Distractability - limited ability to screen out irrelevant stimuli therefore has difficulty in focusing on task ____________
2. Hyperactivity - restless activity (twisting, squirming, always up and down, tapping fingers or feet) ____________
3. Hypoactivity - lethargic - Seems to lack interest or motivation to learn through moving ____________
4. Perseveration - repeats excessively some words or actions without 'apparent' reason - gets stuck on some letter, sound or word, seems to need security of repeating same word or action over and over again ____________
5. Disinhibition - grabs, puts hands where they don't belong, little regard for danger, can't wait - runs out of line - has to be first, little regard for regulations ____________

6. Impulsivity - Irresistible reactions to stimuli - focuses on paper to be rattled, walls to be fingered, books to be slammed opened and closed, sounds to be made, etc. ______________

7. Significant variation in performance levels from hour to hour, day to day ______________

## LANGUAGE DEVELOPMENT

1. Does not enjoy sound and word games ______________

2. Difficulty in recognizing differences in sounds or words presented verbally ______________

3. Difficulty in identifying rhyming elements or words ______________

4. Difficulty in understanding verbal directions ______________

5. Difficulty expressing thoughts and ideas ______________

6. Difficulty understanding meaning of words ______________

7. Difficulty in classifying or categorizing words ______________

8. Difficulty identifying incomplete words ______________

9. Difficulty in blending separate parts of a word into a whole word ______________

10. Difficulty with sentence structure or grammatic form ______________

11. Difficulty reproducing from memory sequences presented verbally ______________

## PERSONALITY DEVELOPMENT

1. Daydreams ______________

2. Preoccupied with certain themes - such as violence, desertion, etc. ______________

3. Exaggerated emotional responses (cries too easily, laughs too loud, fears) ______________

4. Nervous traits and mannerisms, such as nail biting, thumb sucking, pencil chewing ______________

5. Insecurity - need for constant approval and reassurance ______________

6. Rigidity - resists changes in routine ______________

7. Seems to have difficulty in being accepted by peers ______________

8. Overly bold and aggressive ______________

# APPENDIX G

# SUMMARY OF FUNCTION OF ITINERANT MASTER TEACHER

## BUCKS COUNTY ITINERANT SUPPORTIVE SERVICES FOR LEARNING DISABLED CHILDREN (MINIMALLY BRAIN DAMGED) IN THE REGULAR CLASSROOM

Itinerant services to school districts will be provided to:

1. Classroom Teachers
    a. Provide support through materials, suggestions and curriculum adjustment for children with learning disabilities.
    b. Help teacher gain more insight into the dynamics of the child with learning disabilities.
    c. Help teacher become a better observer of a child's learning problems and development through prepared literature and observation scales.
    d. Demonstrate specific techniques and lend materials needed for more efficient learning by the child. (Materials to be replaced later by school district).

2. The Child
    Provide, in certain instances, educational assessment and minimal diagnostic teaching based on case histories, testing, reports, observation and use of specialized materials and techniques. However, emphasis will continue on giving the child's teacher supportive services rather than direct services to the child.

3. Administration
    a. Cooperate with local districts in determining the number of children needing services and types of programs to be considered.
    b. Assist with new program arrangements and support, particularly in the early stages, in resource rooms, pre-school, kindergarten, and regular classes.
    c. Consult and introduce the use of materials and techniques for general classroom use that may be of preventative nature.
    d. Work with reading specialists and speech therapists, physical education teachers, and other professionals in planning for a curriculum for a particular child.
    e. Participate in in-service meetings for future planning and demonstrations to faculty.

### The Itinerant Personnel

- Are not Psychologists - testing and observations are limited to educational assessments and recommendations.
- Are not Reading Specialists - however, they cooperatively work with reading specialists when the child's reading problem is a symptom of a specific learning disability.
- Are not Tutors - Diagnostic teaching, when offered, is limited to finding most efficient learning channels.

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# APPENDIX H

# GUIDELINES FOR PREVENTION PROGRAM

# BUCKS COUNTY PUBLIC SCHOOLS

## LEARNING DISABILITIES SUPPORTIVE SERVICES

## GUIDELINES FOR PREVENTION PROGRAM

### I. PURPOSE

1. To provide information, demonstrations and training in basic perceptual-sensory-motor activities to earliest primary level classes.

2. To identify those children with the more severe coordination and perceptual deficits who may be potential learning disabled children.

3. To provide training in small groups for those children who have been identified.

### II. PARTICIPATION

1. Participation in program should be upon the interest and request of the individual classroom teacher on a voluntary basis.

2. It is assumed that those teachers who elect to participate will carry on a daily program of 10 - 20 minutes with their classes.

3. Provisions should be made by the district for personnel to continue the work begun by the County Specialist (described below) in guiding and planning daily programs for small groups, such as, physical education and/or reading personnel) and for personnel to carry out those training activities on a daily basis (aide, volunteers, etc.)

### III. ROLE OF COUNTY SENSORY-MOTOR SPECIALIST

1. Through weekly demonstration lessons the classroom teacher will be familiarized with the techniques of sensory-motor training. She will then carry out the program with her class on a daily basis until the specialist returns to demonstrate a subsequent lesson.

2. Provide and demonstrate a screening procedure to identify the children with the more severe motoric and/or perceptual problems who will receive special help in small groups. The teacher will do the actual evaluation with the guidance of the specialist.

3. The County specialist will then work with the district specialist to familiarize him with 1) indepth evaluation techniques, and 2) training methods to be used with the small group. Through the efforts of both specialists initially, a person should be trained to implement the prescribed daily training activities.

4. When classroom teachers and district specialist(s) are ready, the County specialist will phase out of the program to an on-call status.

## IV. SUMMARY OF PROCEDURES

PHASE I

Step (1) County specialist conduct weekly demonstration classes.

Step (2) Classroom teacher carries out daily program with class.

PHASE II

Step (3) County specialist introduces screening techniques.

Step (4) Classroom teacher screens class to select children for small group instruction.

PHASE III

Step (5) County specialist guides program planning for small groups with district specialist. (Adaptive physical education, remedial reading, etc.)

Step (6) County specialist and/or district specialist trains para-professional (aide, volunteer, etc.) who will carry out daily program.

PHASE IV

Step (7) Classroom and small group operating on a daily basis by district personnel guided by district specialist. County specialist on-call.

# APPENDIX I

# FORMS USED IN THE ITINERANT PROGRAM

## BUCKS COUNTY BOARD OF SCHOOL DIRECTORS

## REFERRAL FORM FOR ITINERANT LEARNING DISABILITIES SERVICES

PUPIL NAME__________________________ SCHOOL__________________________

BIRTH DATE__________________________ C.A.__________

GRADE__________________ TEACHER__________________________

1. REASON FOR REFERRAL:

2. BRIEFLY HOW DOES THIS CHILD BEHAVE IN THE SCHOOL ENVIRONMENT:

3. IN WHICH AREAS DO THE CHILD'S PROBLEM SEEM MOST APPARENT:

Visual Perception______________ Language Development______________
Visual Motor______________ Reading______________
Auditory Perception______________ Arithmetic______________
Fine or Gross Motor______________ Other (specify)______________

4. WHAT ARE THIS CHILD'S APPROXIMATE LEVELS?

READING: Word Rec.______________ COMP.______________

Spelling______________ ARITHMETIC______________

5. HAS THIS CHILD BEEN SEEN BY:

Vision Specialist______________ Speech or Language Therapist__________
Motor Specialist______________ Psychologist______________

6. WHERE ARE THE ABOVE TEST RESULTS AND SCHOOL HISTORY INFORMATION AVAILABLE?

## BUCKS COUNTY BOARD OF SCHOOL DIRECTORS

## REFERRAL FORM

## ITINERANT LEARNING DISABILITIES

PUPIL NAME____________________ SCHOOL____________________

BIRTH DATE____________________ C.A. __________

GRADE__________ TEACHER____________________

REASON FOR REFERRAL:

HAS THE DISTRICT PSYCHOLOGIST SEEN THIS CHILD?

ARE INTELLIGENCE TEST RESULTS READILY AVAILABLE?__________ WHERE FILED?__________

WHAT ARE THIS CHILD'S APPROXIMATE LEVELS?

READING: VOC._______________ COMP._______________

SPELLING____________________

MATH____________________

HAS THIS CHILD BEEN CHECKED FOR POSSIBLE VISUAL OR AUDITORY PROBLEMS

1. SNELLEN: DATE_______________ 1. AUDIOMETER DATA_______________

2. TELEBINOCULAR: DATE__________ 2. AUDITORY DISCRIMINATION TEST DATE _______________

BRIEFLY HOW DOES THIS CHILD BEHAVE IN:

1. CLASSROOM

2. PLAYGROUND

# BUCKS COUNTY BOARD OF SCHOOL DIRECTORS

## LEARNING DISABILITIES PROGRAM

NAME______________________________ DATE____________________

C.A.__________ GRADE________________ EXAMINER____________________

SCHOOL________________ DISTRICT____________________________

OBSERVATIONS

EDUCATIONAL RECOMMENDATIONS

BUCKS COUNTY PUBLIC SCHOOLS

## ITINERANT LEARNING DISABILITIES MATERIALS CHECK LIST

SCHOOL: ______________________________

TEACHER: ______________________________

FOR: ______________________________

| | TEACHER EDITION | STUDENT BOOK | DATE | | |
|---|---|---|---|---|---|
| EXPENDABLE | | | IN | OUT | |
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## BUCKS COUNTY PUBLIC SCHOOLS

## ITINERANT SUPPORTIVE SERVICE
## LEARNING DISABILITIES

In helping a teacher aid a child with a learning problem, it is necessary to prescribe for the area of weakness. An effective way to facilitate the prescription is to supply the teacher with the proper materials on the spot.

Both permanent and consumable materials are supplied. It is requested that the consumable materials be replaced so that they will be made available to other pupils in your district.

Listed below are a few types of consumable materials that are consistently used and which can serve as a basis for exchange for materials supplied to your district.

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| | |
|---|---|
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|---|---|---|
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| P102 | " II figure completion | 1.55 " |
| P103 | " III shape identification | 2.55 " |

Language & Numbers Series

| | | |
|---|---|---|
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| P202 | " II Addition | 2.70 |
| P203 | " III Action Verbs-subt.-mult. | 2.70 |
| P204 | " IV Arithmetic Problems-div. | 2.65 |
| P205 | " V General knowledge | 2.70 |
| P401 | The Plus marker (for each student) | .50 |
| P301 | Teacher's manual | 1.00 |

Allied Education Council
Distribution Center
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Galien,Michigan 49113

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# APPENDIX J

# SAMPLE ACTIVITIES
# USED IN
# PREVENTION PHASE OF PROGRAM

## SECTION 1.

## BODY IMAGE, LATERALITY - DIRECTIONALITY

The purpose of this portion of the program is to provide the child with a means of organizing his world and the things in it. Since, for each individual, the center of the universe is himself, it is the individual that we use as a point of reference to help him to organize his world. The first two phases of this program, body image and laterality, are aimed at helping the individual to understand himself. The third portion, directionality, is aimed at helping the child to use what he knows about himself to direct his own movements, to move by the directions of someone else, to direct someone else, and to discover order or organization in his world.

### OUTCOMES

1. Improved ability to follow instructions given in class.
2. Awareness of the distinction between sides of things in order to establish a beginning point of words, letters, or numbers and thereby avoid reversals in reading and writing.

3. Awareness of the order and organization that does exist as a basis for learning concepts of mathematics.

4. Awareness of the relationship between movement and the symbolic descriptors of movement as well as the concept of opposites for the enhancement of language skills.

5. Improved ability to give instructions, recall and relate instructions in sequence and, therefore, the improved ability to tell stories.

### BODY IMAGE

Body image includes all of the concepts, beliefs, and fantasies a child holds about himself as to how he is constructed inside as well as outside, how his parts work, their names and their functions. If his body image is distorted, chances are that all subsequent perceptual and conceptual development will be distorted, since body image is the base upon which subsequent development is built. This is not to say that knowing where his ankles and elbows are will teach him to read, but not knowing where his ankles and elbows are may contribute to his not being able to learn - how to learn.

### ACTIVITIES

1. The leader asks the child to touch various parts of his own body with both hands. Response should be automatic and smooth.

2. The leader touches parts of his body. The child responds by touching the same part on his own body and names them.

3. The child is asked to assume various positions on the floor, such as:

   "Lay on your back"
   "Lay on your belly"
   "Sit on the back of your legs"

4. Activities or games involving skills and skill instruction, such as:

   "Throw the ball with one hand"
   "Kick the ball with your foot"

5. Have the child be on the floor (before exercise) and feel his heartbeat. Point out the comparative expansion of his chest when he breathes normally and when he inhales deeply. Have him place his hand in front of his face to feel the difference in pressure of the expired air. Then have the class run in place for about 30 seconds. Stop them. Have them lie down again and point out the differences in the heartbeat and breathing and the location and function of the heart and lungs.

6. Have them swallow water (before lunch or late in the afternoon) and "swish it around in their bellies" to point out the location of the stomach.

7. Have the children lie against a large piece of cardboard and trace the outline of their bodies. Then let them cut out the shape and paint in the parts pointing out that "this is you!"

8. Have the child do puzzles of people.

9. Have the child identify parts of the bodies of people in pictures.

10. Have the child draw pictures of his own body.

The above listed are just a few of the many activities that would be appropriate to enhance body image. There are many other activities that can be and, in fact, are being used. Activities presented in subsequent phases of this program and in the regular physical education program will reinforce those concepts developed in this phase.

## LATERALITY

Laterality is an extension of body image which, when established, enables the child to automatically discriminate and identify the right and left sides of the body. Laterality includes an internal awareness of the inter-relationship between the two sides of the body and, therefore, when laterality is not intact, a deviation in posture or body mechanics might result. Laterality training should include activities which require the child to perform tasks on the opposite side of the midline and, although not usually considered part of laterality, activities which will develop awareness of front, back, top, bottom, upper and lower planes of the body.

## ACTIVITIES

1. Balance activities (see section 3)

2. Rope Activities (see section 4)

3. Animal Walks

4. Trampoline type activities.

5. In order to establish a constant reference have the child shake hands with the teacher each day as he enters and leaves the room, or with partners in class activities. At the outset it is advisable to instruct the child that a handshake is merely a grasping of the other person's right hand with your own right hand. Discourage vigorous "pumping" as this will result in a distraction from the main objectives of the activity. The handshake, however, should be firm. Emphasize that the handshake is always done with the right hand. This, in fact, is the main advantage to this technique since it gives the child a constant point of reference. All future errors in right-left discrimination can be corrected by referring to the handshake.

6. Using the handshake as a guide, ask the child to identify the right and left member of paired parts and right and left sides of single parts (such as, nose and trunk). Point out that there is also a right and left side of each individual part, such as, a right side of the left leg. However, the main purpose at these early stages is to teach the child about the right and left sides of the body in gross terms.

7. Using rights and lefts, play games like "Simon says", "Angels in the Snow", etc.

8. Give each child a wand and play follow the leader. The leader stands with his back to the class and places the wand in various semaphore positions. The children imitate his movement. After some practice the children are asked to identify the position by four descriptors:

   a) Hand holding the wand

   b) Level of the distal end of the wand
      1) high-above the shoulder
      2) middle-between shoulder and knee
      3) low-below the knee

   c) Side - same or opposite as the hand holding the wand

   d) In front, back or to the side of the body (optional).

It has been found best to concentrate on one descriptor at a time. Verbal response should be initially by the class and then as individuals. The leader should cue the responses at the outset by asking, "hand", "level", "side", "front or back". When the child can completely describe the position of the wand without cues, he has mastered this activity.

9. Have the child continually strike a Marsden ball or tether ball, or volley, or throw a ball against a wall and catch it with the same hand, or kick a ball against the wall - trap it with the same foot and kick it again. Each time the ball is handled, either upon reception or propulsion, the child calls out the hand being used.

This activity will enhance laterality in two ways: 1) the repetition of identifying right and left sides of the body will reinforce those concepts, and 2) in the higher level activities, such as, throwing and kicking, the child will discover a preferred side. Knowing which hand the child throws best with will help him to discriminate between the two sides. It is not, however, recommended that the teacher attempt to either establish or change dominance. Dominance should evolve naturally from use.

10. Walk balance beam alternately raising left and right legs or arms and saying, "right arm (leg) up! Left arm up!"

11. Do #10 while watching shadow projected upon the wall. (A spotlight or overhead projector placed behind the subject will cast a strong shadow on the wall the subject is facing.) This will increase the amount of immediate visual feedback. Other activities, such as, animal walks, jumping jacks, dance, rope skipping, and ball activities may be performed using the shadow.

12. Side bending. Each child stands with his hands on his hips and is instructed to bend to one side or the other. He is then asked which side bends and which side stretches. This activity can also be used for front and back.

13. Transfer to academic work. Once the child has a firm understanding of the rightness and leftness of his own body, he can begin to apply these directions to academic work. He can be taught to read "from left to right", or that the "straight line on the 'b' is on the left and the straight line on the 'd' is on the right side." This is possible at this time since the right and left referred to on the worksheet or book are on the same side as the right and left of the child's body.

Do not ask the child to identify right and left in pictures of people at this point. The right hand of a person who is facing you would be on your left side. A picture of that person would show his right hand on the left side of the page. This would appear as an inconsistency until the child has had training in directionality.

## DIRECTIONALITY

Body image and laterality are closely related in that they are both means of identifying and organizing the parts of the body. In order to develop directionality, body image and laterality must be developed to the degree that the child can use these concepts to learn new concepts.

Directionality is a projection of laterality into space. It involves:

1. Using laterality to guide our own movements through space.

2. Recognizing that a right or left direction is referred to a person's own body and that right and left changes with a change in the orientation of our bodies.

3. Recognizing right and left in others.

4. Giving directions to someone else.

The activities presented below follow a progression as listed above.

## ACTIVITIES

### A. TIRE - HOPSCOTCH

Equipment - 10-12 tires preferably small bicycle tires with one sidewall painted white.

Formation - Line formation.

Tires should be arranged as indicated:

0000000000
⟶ 0000000000

### HOW TO PLAY

1. Children stand in line facing the tires. They are asked to walk or run through the tires placing one foot in each tire. Have them practice until "you find the easiest way". They should move through the tires alternating feet so that only the right foot steps in the tires on the right and only the left foot steps in the tires on the left.

2. "Who can walk (run, march, or hop) through the tires and tell me which foot you are putting in each tire as you go".

3. Repeat #2 but either turn over some tires so that a color pattern is formed or remove some tires then ask, "Who can hop through just the white tires and tell me which foot you are hopping on?"

Have the children replicate the tire pattern with poker chips, draw the pattern on the chalkboard and then on paper. These activities will help the children to transfer their experience to paper work and hence to academic tasks.

A wide variety of patterns can be executed in this manner. This activity is a first step in helping the child to organize the space in front of him as left and right space. It may also be used as a rhythmic activity in subsequent training.

B. POINTING - TURNING AND JUMPING

1. "Put your hands up like an airplane!"
2. "Now, point with your fingers! What are you pointing at?" (Pointing may have to be explained).
3. "Drop your hands! Raise the hand that you use to shake hands! What hand is that? (children respond) What is it pointing at? (children respond) Now turn and face the thing you were pointing at! Which way did you turn? (children respond)". Repeat the procedure until the children have completed at least a full circle.
4. Repeat step #2 and step #3 for the left turn.
5. "Who can turn left? Who can turn right?"
6. "Who can point to where you will be facing if you turn right two times and then turn left?"
7. Introduce jumping and turning in the air.
8. Introduce the 1/2 turn, pointing out that a half turn to the right or a half turn to the left brings you to the same position.

C. ROPE ACTIVITIES

Equipment - Long rope 20-50'.

Formation - line - progressive along the rope.

HOW TO PLAY

1. Have each child stand so the rope (which should be straight) is on their right side.
2. Ask them to point in the direction they would have to jump in order to jump over the rope.
3. Ask them which hand they are pointing with and what direction they are pointing.
4. Ask them to tell you something in the room they are pointing at.
5. Ask them what else is on the same side as the thing that they have just named.
6. Ask them to jump across the rope and tell you which way they jumped.

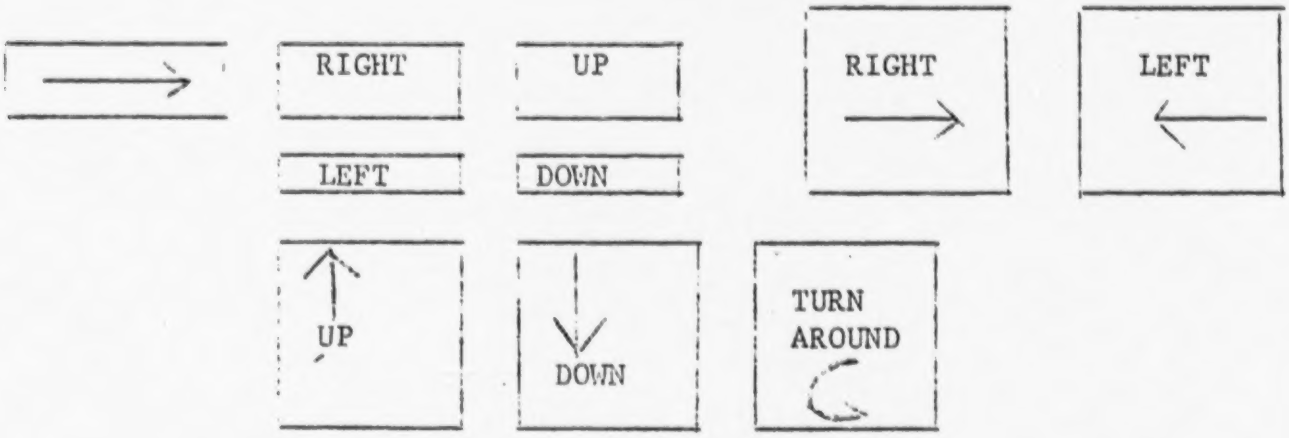
7. Run the rope around the floor in a zig-zag manner and have the children jump along and across the rope on command and tell you which way they jumped each time they jump. Every one should jump right at the same time. In this activity the child is using left and right in rapid alternating sequence while he is moving forward and at the same time changing his orientation in the room.

8. Repeat #7 but start the child with one foot on the rope. Have him shift feet on command and tell you either - 1) which foot is on the rope, or 2) which foot came off the rope and which direction he jumped.

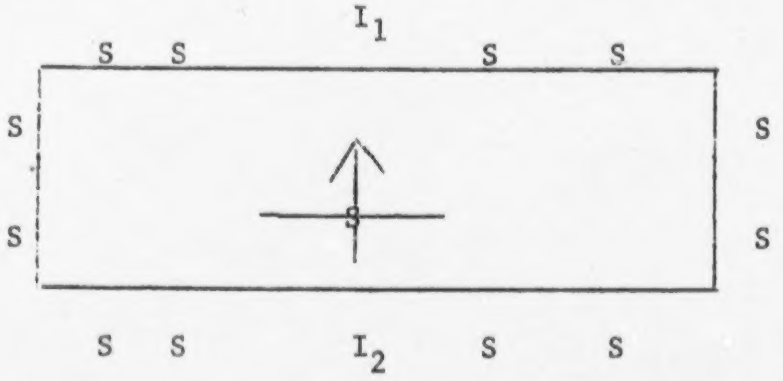
### D. TRAMPOLINE ROUTINES

Equipment - Trampoline. These routines can also be used on a mattress with box springs, or can be effectively used on the floor. However, the trampoline has been found to be most effective for this technique because the children enjoy it and because of the nature of the trampoline, the children can continue the activity for a longer period and perform more tasks than would be possible on the floor. Trampolining can be a safe activity but should only be used by a person who is familiar with the necessary safety precautions.

FLASH CARDS



Formation - One person on the trampoline at a time facing one of the two instructors. Other students are spaced around the sides of the trampoline as spotters.



## HOW TO PLAY

1. The subject is instructed to "start bouncing" and does so while facing $I_1$, who holds up a flash card which gives the child one of the following directions:

   Turn around - the child turns and faces the other instructor
   Turn right - the child executes a 1/4 turn and immediately
   Turn left - turns back to face the same instructor
   Down - the child performs a knee drop
   Up - the child performs an extra high bounce

2. As the child executes the move he also shouts the direction he is moving.

3. On the "turn around" cue the child executes a half turn and faces $I_2$. Immediately upon the completion of the turn $I_2$ flashes whichever right or left direction had been flashed last by $I_1$.

The major objective in this activity is to reinforce the concept that rights and lefts are reference to one's own body.

4. Other Variations

   a. With the subject blindfolded touch a side of his body and have him turn in that direction and tell which way.

   b. With the subject blindfolded have him turn in the direction of a sound (bell, someone calling his name)

   c. Points of the compass.

   d. Clockwise - Counter-clockwise

   e. Positions of the numbers on the clock.

   f. Angles - Azimuth.

   g. Movement exploration approach -
      1) Child is facing east "Can you turn to your right to face north?"
      2) Child is facing 12 o'clock. "Can you turn to your left to face 9 o'clock?"

It should be emphasized that in addition to the teacher being aware of the safety procedures involved in trampolining, it will also be necessary for the children to have some prerequisite skill.

The child should be able to bounce, balance his body, and remain in control and in the center of the trampoline. The knee drop should be used only after it has been taught through a proper progression, since this stunt places the child in a position which makes the back vulnerable to sprain or more serious injury. If the size of the trampoline permits, the seat drop may be used in place of the knee drop.

## E - THE PEACH BASKET MAZE

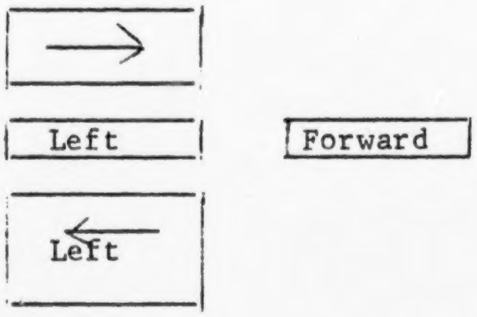
Equipment - 6-12 peach baskets or substitutes (wastepaper basket, potato chip or ice cream containers, etc.)

- flashcards

arrows

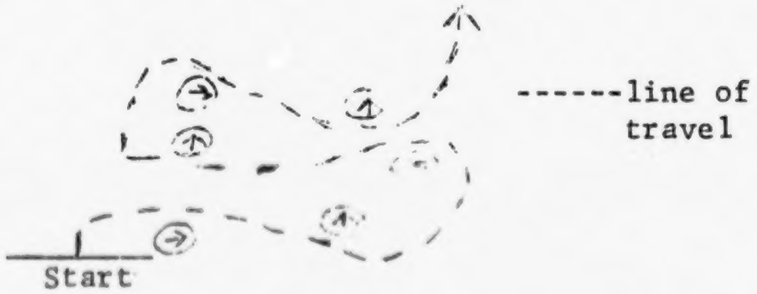
words

combination



- card holders

Formation - one child moves through the maze at a time. The baskets are arranged as per diagram.



## HOW TO PLAY

1. The flashcards are placed on top of the basket so that as the child arrives at a basket he will be given a direction that will send him to the next basket in the maze.

2. As the child arrives at a basket he reads the card, points in the direction he should move, tells what the direction is, and executes the move.

3. For the children who cannot read the cards they can go through the maze using just the arrows, then progressing to the combination cards and then to the word cards.

4. Follow #3 above have the children replace the cards, i.e. words for arrows, etc.

## ACADEMIC SEQUENCING ACTIVITIES

Once the children can maneuver through the maze with a minimum of difficulty, new problems can be built into the task which are related to academic concepts.

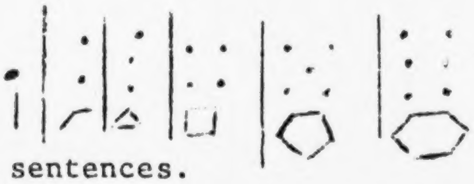
5. Numbers - follow a number sequence through the maze.

6. Alphabetical order.

7. Progressions of size.

8. Progressions of color - light to dark.

9. Progressions of number of members.



10. Simple sentences.

In each of the above the children should be given a packet of cards, which he is instructed to place on the basket in the correct sequence. When he has completed, for example, replacing the number progression with an alphabetical progression, the class can analyze his performance.

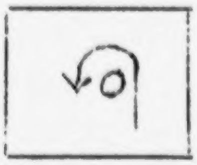
11. Have each child construct a maze model at his desk using blocks or flashcards.

12. Have each child draw a diagram of the maze showing how he proceeded through it.

13. Have each child write directions on how to go through the maze.

### OTHER VARIATIONS

14. For spacial relations make flashcards which show a line of progress to and away from the basket, on which side of the child's body the basket should be as he passes, and how far around it he should go.



For example, the illustration shows that the basket would be on the child's left and that he walk halfway around the basket and walks in the opposite direction.

15. Have the children run, hop, skip, jump, or ride gym scooters or bikes (outside) or dribble balls through the maze.

16. Run through the maze for time.

17. Set up two parallel mazes and run races.

### F - FIRE DRILL

Equipment - A tire for each child (preferably a bicycle tire)

Formation - Scatter

HOW TO PLAY

1. Each child stands inside his tire facing the leader. The leader instructs the children to jump out of his tire on command and in the direction indicated. The leader then calls the command, "Right, left, forward or backward and as the child jumps in the direction indicated he calls, "Out!" Then the leader calls "In" and as the children execute the jump, they call the direction in which they are traveling - which will be opposite to the direction that was called by the leader.

VARIATIONS

2. Using a touch or sound to indicate the direction to be jumped when the subjects are blindfolded.

3. Flashcards.

4. Using points of the compass, clock, etc.

5. Combining jumps and turns such as, "Jump to the right and make a quarter turn to the left". Ask the children to predict where they will be facing.

This activity has been found to be helpful in demonstrating the concept of opposites as well as the relationship between sets of opposites. For example, out and in are opposites as are forward and backward, therefore, if you jump forward to get out, you must jump backward to get in. Be sure that the child is always facing the leader, however, since changing orientation will also change the direction, the child must jump to perform the task.

The above activities are useful in helping the children to reference right and left to themselves, and to project right and left into space for the purpose of directing movement through space. The activities presented below are designed to help the child recognize right and left in others in order that he will be able to give others directions.

G - PARTNER EXERCISE

Equipment - none

Formation - scatter with partners. The children should be standing so that one partner is facing forward.

HOW TO PLAY - The leader gives the class the following directions:

1. "Shake hands with your partner! What hand did you use?" (children respond) Be sure to allow the children to respond and that they are all responding correctly.

2. "Is your partner's shaking hand on the same side as your shaking hand?" "No!" That is correct! It is on the opposite side from yours."

3. "What part of the room are you facing - front or back? Is your partner facing the same or opposite way as you are? Is his hand on the same or opposite side as your own?"

4. "Now, do not let go of your partner's hand but turn so that both of you are facing the back of the room."

Allow time for the children to explore the various ways to solve this problem and arrive at the easiest and most comfortable solution.

5. "Now, what part of the room are you facing? Are you both facing the same or opposite way? Are your right hands on the same or opposite sides?"

6. Repeat steps 4 and 5 so that both partners are facing the front of the room.

7. Return to starting position with partners facing each other and repeat the procedure pointing out the left hand as being opposite from the right hand.

8. After some practice in the above, have the class observe a pair going through the exercise. Discuss and point out:

   a) Facing each other means looking in opposite directions.
   b) Facing the back of another person means that both are looking in the same direction.
   c) The right hand of people looking in the direction opposite from you will be on the opposite side from yours.
   d) The right hand of people looking in the same direction as you will be on the same side as yours.

9. Have the children look at pictures of people, animals, cars, airplanes, etc. to find right and left parts. (see Getman, Developing Learning Readiness, Webstermasters Program I). Ask the children why in a picture of a man facing you, his hand is on the left side of the page.

H - WAND DRILL

This is the same as the wand drill in the part on laterality (see section 1,) except that the leader faces the class.

I - MARCHING AND CLOSE ORDER DRILL

Equipment - none

Formation - line - standing side by side;
column - standing one behind the other.

HOW TO PLAY

1. In a line formation have the children execute right face, left face, and about face on command.

2. Have them march from class to class (if they change classes).
3. Teach each child the commands and allow them to march or drill "the troop".
4. Present each leader with challenges, such as, "March the class so that they are in a line formation facing the chalkboard".

## J - ROBOT GAMES

In each of the games listed below the class is divided into teams of two. One member of the team is a robot who is blindfolded and must follow the commands given by his partner, the controller. In each case the commands given by the controller are: the direction to move or turn, (right, left, forward, backward) and how many steps to take in that direction, or "HALT!" The controller must remain seated and facing the same direction at all times.

### 1. MAZE RACE

Equipment and Formation - This game is set up similar to Activity E, The Peach Basket Maze, above, except that the child who moves through the maze is blindfolded and must follow the oral directions given by his partner, the controller. A timer (1 minute) is needed.

### HOW TO PLAY

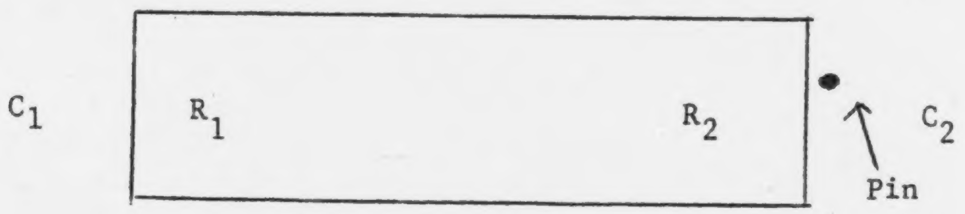
On the starting signal the robot begins to move through the maze on the commands of the controller. The team receives one point for each basket the robot passes on two sides in sequence.

A team's turn ends when the time limit ends or when the robot either leaves the course or bumps into a basket.

### 2. CAPTURE THE FLAG

Equipment - 2 blindfolds, one plastic bowling pin.

Formation - Area laid out as indicated in diagram.



### HOW TO PLAY

The objective of the game is for $R_1$ to knock down the pin by walking into it before $R_2$ can tag him.

### 3. BOWLING

Equipment - 1 set of 10 bowling pins (or plastic detergent bottles)
2 blindfolds

Formation - Same as CAPTURE THE FLAG above except that after the robots are blindfolded each controller places five of the pins somewhere in the playing area.

## HOW TO PLAY

The objective of the game is for the robots to be directed to knock over the pins by walking into them. When a pin is knocked down it is awarded to the controller of the team that knocked it down. If a pin is knocked down because a robot moved in a direction different than the command given to him, the controller on the other team replaces the pin somewhere in the playing area.

## VARIATION

Instead of having the robots move by descriptive command, each controller could be given a different rhythm instrument. The controller would then line himself up on his robot and a pin and strike or play the instrument the same number of times as the number of steps he wishes his robot to take toward the sound. This gives the robot practice in: 1) localizing a sound, 2) discriminating between two different sounds, 3) relating a rhythmic pattern to a motor action (5 beats to 5 steps).

In each of the robot games each member of the team should have a turn to be both robot and controller. Keeping a cumulative score will help to keep the interest high.

The teacher should "spot" robots in motion so that they do not injure themselves walking into objects.

## K - SQUARE DANCING

There are many books and records on the market for square dancing which would be helpful to the teacher. It has been found that some very intricate dances can be taught to young children and children with learning difficulties. A few suggestions are offered below:

1. Teach each skill step by step having the children verbalize each step as they "walk" through the skill.

2. Use records without calls in the learning stages. By doing the calls yourself the children are not lost when they make a mistake. The mistake can be quickly corrected by the teacher and the group reorganized and the dance continued from where it stopped rather than starting over from the beginning. Also the children will be more enthusiastic with a "live" caller.

3. Use different color hats, ties, or pins to signify ladies and gents when there is not an equal number of boys and girls.

4. In advanced stages allow sets to work out dances themselves from records that have "calls". Be sure to choose dances that have skills which the children already know.

As the teacher observes the children performing the tasks involved in the activities, it will become obvious that training other than directionality is occurring. It is the directionality aspect, however, which should be the major emphasis since this is the stepping stone to the next level, developing language concepts through movement.

# APPENDIX K

## MATERIALS USED IN LEARNING DISABILITIES PROGRAM

PERCEPTUAL MATERIALS
LANGUAGE MATERIALS
LISTENING SKILLS MATERIAL
ARITHMETIC MATERIALS
READING MATERIALS
MOTOR EQUIPMENT

# RECOMMENDED BASIC MATERIALS LIST

## COUNTY LEARNING DISABILITIES STAFF

## PERCEPTUAL MATERIALS

| ITEM | COMPANY AND ADDRESS | PURPOSE | PRICE |
|---|---|---|---|
| EDL (Educational Developmental Lab.Inc.)<br>Division of McGraw Hill | Penna. Educational Aids<br>16 E. Lancaster Ave.<br>Paoli, Pa. | Improve visual memory, attention | |
| Flash-X Tachistoscope | | | $7.20<br>manua |
| Flash X sets<br>1. X-1<br>X-2<br>X-4<br>X-0 | | (12 discs, 480 exposutes) | 3.60 |
| Fitzhugh Plus Program<br>Level 1<br>Level 2<br>Level 3 | Allied Education Council<br>Distribution Center<br>Galien, Michigan 49113 | Spatial Organization series. Stresses visual perception, language & math concepts | 1.55<br>per b |
| Perceptual Training Activities Handbook by Betty Van Witser | Teachers College Press<br>525 W. 120th St.<br>New York, N.Y. 10027 | | |
| Michigan Tracking Programs | Ann Arbor Publishers<br>Campus Village Arcade<br>611 Church St.<br>Ann Arbor, Mich. 48104 | Visual decoding, Visual memory, Sequential, Organization | |
| Symbol Tracking | | | 1.50 |
| Visual Tracking | | | 1.50 |
| Word Tracking | | | 1.50 |
| Listening I & II | | | |
| Try | Noble & Noble Pub. Inc.<br>750 Third Ave.<br>New York, N.Y. 10017 | Kdg.1st-Sp.Ed. Develops visual-motor-Sequential | |
| Regular Kit | | Readiness kit of plastic forms with corresponding workbook | 20.00 |
| Workbooks Task 1<br>Task 2<br>Task 3 | | | |
| Teacher's editions<br>Task 1<br>Task 2<br>Task 3 | | | |
| Frostig Program | Follett Pub. Co.<br>1010 W. Washington Blvd.<br>Chicago, Ill. 60607 | Visual Perceptual Training | |

## PERCEPTUAL MATERIALS

| ITEM | COMPANY AND ADDRESS | PURPOSE | PRICE |
|---|---|---|---|
| DLM | Developmental Learning Materials<br>3505 N. Ashland Ave<br>Chicago, Ill. 60657 | Perceptual training activities | |
| a. Pegboards & Pegs | | | |
| M128 Board | | | $1.50 ea |
| M129 Pegs | | | 1.00 ea |
| P150 Pegboard designs | | | 7.50 |
| b. Sequential Pics P127 | | | 1.00 |
| c. Assoc. Pic. Cards I, II, III | | | 1.00 |
| d. Spatial Relation Pic.Cards P125 | | | 1.00 |
| e. Clear Stencils M137 | | | 5.50 |
| f. People Puzzles P101 | | | 4.50 |
| g. Animal Puzzles P102 | | | 4.50 |
| h. Colored Inch Cubes W110 | | | 4.00 bx. |
| i. Colored Inch Cube Designs P-111 | | | 2.75 |
| j. Colored Inch Cube Designs in Perspective P-112 | | | 2.75 |
| k. Plain Inch Cubes W117 | | | 1.75 |
| l. Plain Inch Cube Designs in Perspective P-118 | | | 2.25 |
| m. Small Parquetry W115 | | | 2.25 |
| n. Parquetry Designs (sml) I, II, III | | | 2.25 |
| Hide & Seek Activities Kit | Expression Co.<br>P.O. Box 11<br>Magnolia, Mass. 01931 | Large drawings with objects hidden throughout with riddles to help find them. Each drawing provides material for discussion and acting out feelings | 6.00 kit |
| | | (Guess what workbook) | 1.00 |
| Which Way, How Far, Where (student books) | Rand McNally<br>Box 7600,<br>Chicago, Ill. 60680 | Concepts of direction distance | 1.00 ea |
| Workbooks for above | | space is abstract so has to be used as a base with much instruction | .48 |
| Match & Check | Scott, Foresman Co.<br>99 Bauer Dr.<br>Oakland, N.J. 07436 | Four sets of self-checking Likeness & difference Beginning sounds,etc. | 4.80 ea |

## PERCEPTUAL MATERIALS

| ITEM | COMPANY AND ADDRESS | PURPOSE | PRICE |
|---|---|---|---|
| Sound Order Sense | Department DM<br>Follett Educational Corp<br>1010 West Washington Blvd<br>Chicago, Ill. 60607 | A developmental program in auditory perception | |
| 3825 S.O.S. Base Unit Level | | | $20.00 |
| 3805 Response Book I | | | 1.00 |
| 3806 Response Book II | | | 1.00 |
| 3850 S.O.S. Base Unit Level II | | | 20.00 |
| 3830 Response Book III | | | 1.00 |
| 3831 Response Book IV | | | 1.00 |

## LANGUAGE MATERIALS

| ITEM | COMPANY AND ADDRESS | PURPOSE | PRICE |
|---|---|---|---|
| Peabody Lang.Dev.Kits | American Guidance Service<br>Publishers Bldg.<br>Circle Pines, Minn. 55014 | Language Development through use of puppets, cards, picture stories, magnetic shapes, walkie talkies, tapes, etc. | |
| Level P | | Kdg.& 1st Sp.Ed | $125.00 |
| Level 1 | | 1st - 2nd | 104.00 |
| Level 2 | | 3rd - 4th | 65.00 |
| Level 3 | | 5th - 6th | 50.00 |
| Matrix Games Package | Appleton Century Crafts<br>Dev.of Meredith Corp<br>440 Park Ave.So<br>New York, N.Y. 10016 | Kdg.-1st Sp.Ed. Categorization, Organization, Language | 174.00 |
| Distar Instructional System | Science Research Ass.<br>295 E. Erie St.<br>Chicago, Iil. 60611 | 2 yr.language program | |
| Junior Listen-Hear Classroom pkg. | Follett Publishing Co.<br>1010 W.Washington Blvd.<br>Chicago, Ill. 60607 | Five story books, recordings, teacher source book and activity sheets for developing gross auditory discrimination skills, rhyming, initial consonants,etc. Preschool-age 10 (excellen | 22.35 |
| Listening with Mr. Bunny Big Ears | Mafex Associates<br>Box 519<br>Johnstown, Pa. 15907 | A recorded child drama for speech improvement, especially in listening areas. Excellent for primary and preschool children for language development through dramatic play. | 23.95 |
| Word Generalization Cards | Mafex Associates | 13 words presented in seven different type styles. Has many uses | 4.50 |
| Word Making Cards | Word Making Products<br>P.O. Box 305<br>Salt Lake City, Utah | 412 individual pictures simply drawn offering infinite uses in all aspects of speech and language | 8.00 |

## LANGUAGE MATERIALS

| ITEM | COMPANY AND ADDRESS | PURPOSE | PRICE |
|---|---|---|---|
| Word Making Picture Stickers | Word Making Products<br>P.O. Box 305<br>Salt Lake City, Utah | 432 Gummed stickers 1½x1½". Can be used as above or to teachers imagination | $2.00 |
| Word Making Methods Book | " | 150 suggestions for using above pictures in speech and language activities | 2.50 |
| Advantage | Prentice Hall, Inc.<br>Englewood Cliffs, N.J. | Kdg.-slow first Sp.Ed. Language concepts in workbook form | .93 |
| Teacher's edition | | | |
| First Activities in composition | | Kdg-early first large concepts-cards | 34.80 |
| Teacher's edition | | | 2.75 |
| Auditory Perception Training | Developmental Learning Materials<br>3505 N. Ashland Ave.<br>Chicago, Ill. 60657 | Ability to hear & associate & relate sounds to objects and printed word | |
| Auditory Memory | | | 62.00 |
| Auditory Motor | | | 74.00 |
| Auditory Figure Ground | | | 45.00 |
| Auditory Discrimination | | | 70.00 |
| Auditory Imagery | | | 37.00 |

## LISTENING SKILLS MATERIAL

| ITEM | COMPANY AND ADDRESS | PURPOSE | PRICE |
|---|---|---|---|
| Think, Listen & Say | Eye Gate House, Inc.<br>146-01 Archer Ave.<br>Jamaica, N.Y. 11435 | A developmental listening skills kit which includes filmstrips, records 10 children's workbooks, 1 teacher's manual, sequence cards | $70.00 |
| Listen & Think | Penna. Educational Aids<br>16 Lancaster Ave.<br>Paoli, Penna. | | |
| Listening Games | Acadia Press, Inc.<br>144 South Main Ave<br>Scranton, Pa. | Kdg.1st-Sp.Ed. Development of listening skills by following directions with crayons | 1.00 |
| Easel Games | | | 4.00 |

## ARITHMETIC MATERIALS

| ITEM | COMPANY AND ADDRESS | PURPOSE | PRICE |
|---|---|---|---|
| Pre-number Picture Cards | Harper & Row<br>Elmsford, New York | Pre-mathematics language concepts & sequence cards to place on order | |
| Book A | | | $1.20 |
| Book B | | | 1.20 |
| Book C | | | 1.20 |
| Teacher's edition for each level | | | 1.20 |
| Stern Structural Arithmetic | Houghton Mifflin Co.<br>53 W. 43rd St<br>New York, N.Y. 10036 | Large manipulative math program | |
| Kit 1 | | Kdg - 1st | 52.00 |
| Kit 2 | | 2nd | 42.00 |
| (higher levels, if necessary) | | | |
| 3 Track Program | Mafex Associates,<br>Box 519<br>Johnstown, Pa. 15907 | | |
| Individualized Arith. Instruction Drill Sheets | Love Pub. Co.<br>Denver, Colo. 80222 | Drill book of ditto masters | |
| Attribute Games | Houghton, Mifflin Co. | Good for taking child from concrete to abstract form of math | |
| Kindermath | Ginn & Co.<br>125 Second Ave.<br>Waltham, Mass. | Kdg. Math concepts, Language, Vocab. through picture study | 22.00 |
| Money Ed. Kit | Creative Playthings<br>Princeton, N.J. | To teach money value | 10.00 |
| Math Workshop for children series | Encyclopaedia Britannica Films, Inc.<br>38 West 32nd St.<br>New York, N.Y. | Supplementary workbooks for mat. Not much reading. Requires good reasoning | 1.50 ea |

# READING MATERIALS

| ITEM | COMPANY AND ADDRESS | PURPOSE | PRICE |
|---|---|---|---|
| The First Talking Alphabet | Scott Foresman Co.<br>259 E. Erie St.<br>Chicago, Ill. 60611 | Supplementary Phonics recordings, dittos | |
| 2584-67 Part 1 (beg.consonants) | | | $39.00 |
| 2596-67 Dup.Masters | | | 10.00 |
| 2559 Part II (vowels-blends) | | | 36.00 |
| 2560 Dup.Masters | | | 7.00 |
| Merrill Linguistics Series<br>Levels A-E workbooks | Chas. E. Merrill Books<br>1300 Alum Creek Drive<br>Columbus, Ohio 43216 | Patterned reading program for children not responding to phonics | |
| Programmed Reading Series 1, books 1-7 (Reading level thru 3-5) | Sullivan Associates<br>Webster division<br>McGraw Hill Book Co.<br>Manchester Rd.<br>Manchester, Mo. 63011 | Programmed reading series for children who do not succeed in phonics | 1.35 |
| Rhebus Readers | American Guidance Service,Inc<br>Circle Pines, Minn. | | |
| Specific Skills Series | Barnell Loft, Ltd.<br>111 So. Centre Ave<br>Rockville Center, N.Y. | Drill booklets of specific reading skills | |
| First Talking Story book | Scott Foresman Co. | Excellent selection of records with books. Books from library lists many Caldecott awards-voice excellent. Teachers instr.book included | 57.00-box of 21 - 33-1/3 rpm records. Ind.record cards incl. |
| Sounds I can Hear | Scott Foresman Co. | Auditory training | 15.00 |
| Reading Lab (1-a)<br>Reading Lab (C-1) | Science Research Ass.<br>295 E. Erie St.<br>Chicago, Ill. 60611 | Good for independent reading lesson | 54.50 set<br>54.50 set |
| Palo Alto Reading Program | Harcourt, Brace & World,Inc<br>757 Third Ave.<br>New York, N.Y. 10017 | Books, levels I to III | |
| Open Court Reading Program | Open Court Pub. Co. | Linguistic approach to reading. Excellent series. Workbook records-puzzles, games-good teacher manual | |
| Reading-Thinking Skills workbook<br>Map skills | Continental Press,Inc.<br>Elizabethtown, Pa. | Pre-primer to gr.VI-2 levels ea.gr. Excellent. 2nd level for 3rd gr. readers | .42 per copy |

## MOTOR EQUIPMENT

| ITEM | COMPANY AND ADDRESS | PURPOSE | PRICE |
|---|---|---|---|
| CR 111<br>Rider Roller | Creative Playthings<br>Educational Dept.<br>Princeton, N.J. 08540 | Balance<br>Gross Motor | $4.50 |
| CB 749<br>Boot Straps | | | 3.95 |
| CQ 355 M<br>Shuttle Loop | | Eye-hand | 7.00 |
| Balla Rolla<br>(Heavier weight) | Novo Ed. Toy & Equip Corp.<br>585 Ave. of Americas<br>New York, N.Y. 10011 | Balance<br>Gross Motor | 8.95 |
| Jump Ropes | (Old rope clothesline is best) | | |
| Mats | Program Aids Co. Inc.<br>550 Garden Ave.<br>Mt. Vernon, N.Y. | Small mats approx. 4x4x2 for Kdg. Trans-Pre-first and 1st classrooms-2 per class is sufficient | 35.50 |
| Pathway School Program 1 | Teaching Resources<br>100 Boylston St.<br>Boston, Mass. 02116 | Body posture Fluidity of movement. Balance | 12.00 |
| Inst. Guide | | directionality left & right | 3.00 |
| Clap, Snap & Tap Band Teacher's Manual | I.S. Dennison Co. Inc.<br>5100 W. 82nd St.<br>Minneapolis, Minn. 55431 | Rhythm skills practiced to music through use of body parts | 3.98 |
| Listening & Moving<br>2 records | Educational Activities<br>Freeport, N.Y. | Development of body movement and position in space | 2.50 |
| Balancing Blocks and boards | Creative Playthings<br>Princeton, N.J. | Used for balance-body schema Laterality | 16.95 |
| Jumpin Jimmy Trampolet | " | Gross Motor Development | 10.00 |
| Fractional Circle & Square Board | " | Used for fractions and visual motor | 6.95 |
| Nifty T.V.Viewer and Scrolls | Kurtz Bros.<br>1001 Cassett Rd.<br>Paoli, Pa. 19301 | Language Experience | 7.50 set<br>.85 ea |

## MOTOR EQUIPMENT

| ITEM | COMPANY AND ADDRESS | PURPOSE | PRICE |
|---|---|---|---|
| Play Theatre | Novo Toy Co.<br>585 Ave.of Americas<br>New York, N.Y. 10011 | Language Development | $4.95 |
| Tunnel | " | Gross Motor Coordination Skills | 7.95 |
| Punching Bag (Clown) | Creative Playthings<br>Princeton, N.J. | Tension release | 4.00 |
| Bongo Board | Bongo Corp.<br>545 Fifth Ave.<br>New York, N.Y. | Dynamic Balance | 18.00 |
| Balance Board (or homemade) | Community Playthings<br>Rifton, N.Y. 12471 | | |
| Metronone | Yamaha | Rhythm coordination | |
| Rhythm Instruments | | Rhythm-number concepts | |
| Hula Hoop (1 per child) | J.L. Hammett Co.<br>2393 Vaux Hall Road<br>Union, N.J. 07083 | Game-hoops | 1.50 |
| 8" 10" ball (1 per child) | Passon's Sporting Goods<br>824 Arch St.<br>Phila. Pa. | | 2.20 |
| Gym Scooter | " | | 9.20 |

MATERIALS

| | |
|---|---|
| 1 ea. 50' rope #8 or 10 sash cord | 10.00/100' |
| Masking tape | |
| Oaktag & Construction Paper | |

FREE OR IMPROVISED MATERIALS

| ITEM | NUMBER NEEDED |
|---|---|
| Discarded Auto Tires | 12 ea. |
| Discarded Bike tires | 1 per child |
| Bamboo Poles | As per activity |
| Mailing Tubes 2"x30" | " |
| Plastic Detergent bottles | " |
| Rolled Newspaper | " |
| Carton boxes | " |
| Wood blocks 2"x4"x8" | " |
| Peack baskets or cardboard pretzel cans | " |

## MOTOR EQUIPMENT

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Ebersole, Kephart, Ebersole, Step to Achievement For the Slow Learner, Charles E. Merrill Publishing Co., Columbus, Ohio, $4.95

Chaney & Kephart, Motoric Aids to Perceptual Training, Charles E. Merrill Publishing Co., Columbus, Ohio

Roach & Kephart, The Purdue Perceptual-Motor Survey, Charles E. Merrill Publishing Co., Columbus,Ohio, $4.95

Hackett & Jensen, A Guide to Movement Exploration, Peek Publications, 4067 Transport Street, Palo, Alto, California, 94303, $1.50

Muska Mosston, Developmental Movement, Charles E. Merrill Publishing Co., Columbus, Ohio

Journal of the American Association of Health, Physical Education & Recreation (Periodical published by A A H P E R)

#1, 4, and 5 would be a must for a new program to get started.

## EGO - SELF-IMAGE AND SOCIAL DEVELOPMENT

| ITEM | COMPANY AND ADDRESS | PURPOSE | PRICE |
|---|---|---|---|
| Tapes, books, etc. | American Guidance Service<br>Publishers Bldg.<br>Circle Pines, Minn. 55014 | Developing understanding of self and others-kit | $82.00 |
| S.A.R-set of 4 filmstrips<br>Respect for property<br>consideration for others<br>acceptance of diff.<br>recognition of responsibility | S.A.R.<br>1345 Diversey Parkway<br>Chicago, Ill. 60614 | Social responsibility training | 27.00 |
| Look about you,<br>People we know,<br>Listen, there are sounds around you,<br>Places to go | Guidance Associates<br>Pleasantville, N.Y. | Filmstrip and record-excellent | |
| Listening & Moving<br>2 records | Educational Activities<br>Freeport, N.Y. | Development of body movement and position in space | |
| Set of 8 Dressing Frames | A. Daigger & Co.<br>159 W. Kenzie St.<br>Chicago, Ill. | Training in lacing, buttoning, snapping, hooking, tieing, etc. | 28.00 |
| Parts of Body Instructo | Kurtz Bros.<br>1001 Cassett Rd.<br>Paoli, Pa. | To teach body parts by use of a flannel board | 3.95 |
| Body Concept Masters | D.L.M.<br>3505 N. Ashland Ave.<br>Chicago, Ill. 60659 | | |
| Position in space posters | " | | |
| Man in Action<br>Levels A & B | Educational Book<br>Prentice Hall<br>Englewood Cliffs, N.J. | Social studies and language development series. Request sample. Too excellent to explain here | |

# APPENDIX L

# ROLE OF THE PSYCHIATRIST

# ROLE OF THE PSYCHIATRIST IN THE LEARNING DISABILITY CLASS

1. The psychiatrist needs to help write the educational prescription for the child. This is done not only from Psychiatric evaluation of the child, but also should be based upon observation of the child in the classroom by the psychiatrist. As the child changes, and some of them do quite dramatically in a short period of time, the prescription must be constantly revised. Thus this can only be done in a satisfactory manner by the psychiatrist observing the child in the classroom in a longitudinal fashion in time, that is, day to day, week to week, month to month and then working with the teacher and the other educators involved and updating and revising the educational prescription.

2. A child may respond on the basis of several different factors: A. A realistic response to the person or stimulus, B. a neurotic or internal response, C. the child may be an impulse ridden child and driven by his impulses, or D. a psychotic response. Each of these responses would call for a different way of handling the child and very often a child might vary throughout one day or possibly several days so that he may use anywhere from one to all four of these responses. Unless the teacher knows what type of response he is making and how to cope with it, the educational program will be totally ineffective for that period of time. In A. the child might respond appropriately to the teacher and function well or possibly the teacher may be, for some reason, giving a double message and the child responds to one of them or becomes confused between them so the child may not do the appropriate work, but nevertheless be responding in a realistic level to the message the teacher is giving. In B. the child might view all women acting like the child's mother, or

that if someone uses a phrase or a mannerism that the child's mother uses, the child will respond not to what the teacher actually did or meant, but what he thinks his mother would have meant when she uses that gesture or phrase of speech. In C. if the child is an impulse ridden child he would be driven by impulses that would have no relation or significance to either the teacher nor the mother's personality, behavior or way of doing things, and would thus be puzzling and unexplainable behavior to the teacher. In D. the child might have difficulty in reality testing in certain areas and not in others, or at certain times and not other times. Therefore, the teacher would have to be able to recognize when the child is having trouble with his reality testing and handling of the educational process would have to be different at those times.

3. Body image plays an extremely important part in the learning process and in the child's ability to relate to others. In the various drawings that the child makes throughout the educational year, the psychiatrist can observe the drawings and the progress or lack of progress of the child and help the teacher in her educational plan for the child.

4. In spite of extensive psychological, psychiatric, neurological and educational evaluations done on a child before he enters in a Learning Disability Class, we have found that the child very often will surprise us and manifest more or less psychiatric problems than had been anticipated. Observation of the child in the classroom, that is, in his actual functioning mileau, can aid immeasurably in the evaluation and working out of an educational program for the child. Sometimes children who have been admitted on a trial basis quickly settle down and do beautifully, and conversely other children who have been felt to be ideal candidates quickly

manifest severe emotional or behavioral problems that require their removal from the program.

5. The teacher and other educational people working with the child are only human and have their own problems with certain types of children, or certain types of behavior. As a result and unbeknownst to the teacher she may respond in a negative way to a child or might deal with the child as if the child were somebody else. For example, the teacher's own child or sibling, and thus unconsciously act out a different roll with the child which could seriously alter the educational work with the child. Only the psychiatrist in the classroom observing the interactions would be able to pick this up and then work with the teacher in order that this could be corrected, and thus allow the educational process to move forward as it should. In this regard, working with the teacher about her relationship with the parents can forestall feelings towards the parents of the child being transferred to the child and thus prevent anger or resentment or undue compassion from being directed toward the child, and thus interfering with the child's educational progress.

6. Certain medical conditions that might be concomitant with the learning disability, for example epilepsy, may not be understood by teachers or children and explanations of these illnesses may need to be given to the teachers. Sometimes these affect the child's relationship to other children, and meetings with the children in the classroom discussion can answer their questions they have about others or about themselves. For example, whether they have a defect or not and thus is tied in with their own body image as well as their own self-esteem, guilt feelings, anger and many other types of emotional response.

7. Many children in the Learning Disability Classes require medication to enable them to function better, or even be maintained in a classroom setting at all. These may vary from the use of tranquilizers in some of the neurotic or psychotic reactions to the use of stimulants in some of the hyperactive or hyperkinetic children, distinguishing between what is amenable or possibly amenable to drug therapy and then aid the family physician in the selection and adjustment of the proper medication and proper dosage. In addition to the above list that gives the roll of the psychiatrist in the classroom itself, there are many areas involving parents, teachers, children, other educational personnel and outside medical and psychological resources where the psychiatrist can be very helpful.

Learning disability children by definition have some brain damage, therefore, from the time a child is being considered for admission to the class, it is important that a physician be involved in the evaluation process. Some of the reasons are: 1. to make sure the child has no serious physical problem that should exclude him; 2. to be able to evaluate the early medical life history of the child in order to help separate emotional problems from those who have suffered Central Nervous System insult or defect; 3. to correlate and evaluate the medical evaluations being done on the child, and 4. to suggest additional procedures or trials on medication that might prove helpful for the child.

Most learning disability children have various medical problems in addition to the learning disability problem. Evaluation of the role, if any, the medical problem poses in the educational plan of the child can be made by a psychiatrist. Most physicians and hospitals are reluctant to reveal, to non-medical personnel, their detailed findings because of their uncertainty as to how it will be treated. Just listing the diagnosis or impairment that the child has can be very frightening to the parents and not very helpful to the school. It is important that interpretation of the condition and the prognosis be conveyed to the parents and educators. Very often a child might have been seen by a number of different doctors or clinics and hospitals. Coordination of these reports and summarizing them for the parents and the educational people can be quite anxiety relieving.

RICHARD K. COLE, M.D.
Consulting Psychiatrist
Bucks County Public Schools

# APPENDIX M

# ROLE OF THE VISION SPECIALIST

# AN APPROACH TO VISION CARE FOR THE LEARNING DISABLED CHILD

Jack E. Richman, O.D.

Education accepts the concept that a child's vision is in some way related to academic performance. State laws generally require some type of periodic vision testing, but the implementation varies widely as the degree of expertise professionally goes through a wide range of examiners including teachers, school nurses, school physicians, optometrists, and ophthalmologists.

The entire area of vision and its relationship to learning and reading presently is one of contradictions, vagueness, and confusion.[1, 2]

1. The literature does not show very conclusive relationships between vision and reading.[3, 4] Visual requirements for reading are as varied as the criteria for proper reading.[5, 6] The very fact that different reading approaches are applied to different children in order to teach them attests to the fact that the use of one set of criteria of good visual functions would not hold for all children with reading dysfunction.

A good deal of the problem is one of semantics. This is in the sense that the word "vision" denotes different concepts to the various professional disciplines involved with vision care.[7, 8, 9]

2. Even when there is agreement among a group of professionals of what good "vision" is, it is too often applied in a unitary manner to all children with a reading and/or learning problem. This is done regardless of the level of reading or functional age the child is operating at. In other words, the criteria of good "vision" for a child in first grade learning to read is quite different from one who is reading at a 4th grade level or higher. This difference in visual demands is often not considered, but it is essential that it should be.

The first grader is usually confronted with the following type of visual environmental demands:[10, 11]

a. Large Print

b. Colors

c. Looks at generally well isolated letters or figures in his workbook or blackboard.

d. Sustained visual attention is not requested by the tasks. There is usually a brief or momentary attention span demanded.

e. The prime objective is transformation of the visual symbol into a vocal symbol.

f. More attention is paid to word structure and internal word characteristics.

The child that is reading, has a different set of visual demands:

a. Smaller print

b. Sustained visual attention is demanded by the task.

c. The material is not as well isolated, i.e., words are in sentences and paragraphs.

d. The prime objective is the conceptual and factual content of the material, not the visual-vocal match.

This separation is arbitrary and there is a point in the education process where both sets of visual demands may be placed on the child concurrently.

3. Basically we can consider for convenience sake, two aspects of "vision" relative to the different sets of visual demands.

The first aspect is the "visual mechanism", and the second is the "visual perceptual".

## VISUAL MECHANISM

The question most often raised by the classroom teacher is, "can this child sit and use his eyes comfortably and efficiently for a period of time?" This involves assessment of the visual apparatus and primarily falls beyond the scope of the school. These abilities cannot be assessed completely and cared for within the school setting. The nurses screening alone is presently inadequate in scope and sophistication to answer the teacher's basic question. The type of school screening that has been found more effective is that conducted by eye care professionals,[12, 13] but this does not replace a full visual examination. The areas that should be assessed in order to determine if both eyes are capable of efficient and comfortable functioning at all distances are:

A. Refractive error - Myopia (nearsighted), Hyperopia (farsighted), Astigmia; Amblyopia.

B. Organic Disturbances - any diseases or anomalies of the internal or external ocular structures that interfere with normal sight.

C. Functional Visual Skills -

    1. Ocular Pursuits: ability to track and follow an object with coordinated eye movements.

    2. Accommodative Facility: ability to change focus from distance and near and sustain focus at near comfortably.

    3. Binocular Fixation: ability to look at the same object with both eyes comfortably for a sustained period of time (especially at close).

    4. Suppressions of vision: the blocking out mentally of the image of either eye when such image interferes with the fusing or blending of the two ocular images into a single image.

    5. Convergence-Divergence ability: the ability to turn both eyes inward or outward smoothly and efficiently.

From a thorough clinical assessment of these skills and remediation if indicated, an important educational question can be answered for the teacher of a learning disabled child. Once this aspect of "vision" is assessed and one of the basic educational questions is answered, then we may consider the second aspect of "vision". This is the socalled "visual perceptual" aspect.

VISUAL PERCEPTUAL

The basic educational question raised by the teacher is "what does this child do with what he sees?" A general definition of visual perception acceptable for our purposes would be - The process of internalizing the understanding of visual symbols within the individual.[14]

Obviously, this area is quite broad and a great deal has been written relative to testing and remediation in this area.

The areas that appear to be the more important ones relative to learning to read are:[15]

1. VISUAL COORDINATION AND PURSUIT: The ability to follow and track objects and symbols with coordinated eye movements.

   Example - With head steady, pupil can move eyes to fixate on stable objects in varied places, pursue moving objects such as finger positions, follow picture and word stories left to right without jerky movements.

2. VISUAL-FORM DISCRIMINATION: The ability to differentiate visually the forms and symbols in one's environment.

   Example - Pupil can match identical pictures and symbols, such as abstract designs, letters, numbers and words.

3. VISUAL FIGURE-GROUND DIFFERENTIATION: The ability to perceive objects in foreground and background and to separate them meaningfully.

   Example - Pupil can differentiate picture of self and friends from group picture, differentiate objects in "front" and "back" part of pictures and mock-ups, differentiate his name from among others on paper or chalkboard, perceive simple forms and words imbedded in others.

4. VISUAL MEMORY: The ability to recall accurately prior visual experiences.

   Example - Pupil can recall from visual cues where he stopped in book, can match or verbally recall objects removed or changed in the environment, can match briefly exposed symbols.

5. VISUAL-MOTOR MEMORY: The ability to reproduce motorwise prior visual experiences.

   Example - Pupil can draw designs and symbols following brief exposure, can reproduce letters, numbers, simple words on demand, can portray prior objects or events through gestures or drawings, can reproduce varied patterns and identify hidden materials.

6. VISUAL-MOTOR FINE MUSCLE COORDINATION: The ability to coordinate fine muscles such as those required in eye-hand tasks.

   Example - Pupil can write legibly, trace, and imitate precise body movements without difficulty, can cut, can manipulate, and can judge fine physical responses without gross errors.

7. VISUAL-MOTOR SPATIAL-FORM MANIPULATION: The ability to move in space and to manipulate three-dimensional materials.

   Example - Pupil can build block houses and designs, can draw three-dimensional pictures, complete shop and craft objects, integrate form and space puzzles.

8. VISUAL-MOTOR SPEED OF LEARNING: The ability to learn visual-motor skills from repetitive experience.

   Example - Pupil can respond with increasing speed to rote learning tasks such as copying digit or letter sequences, spelling, specific arithmetic processes, and gross motor skills such as jumping over a rope.

9. VISUAL-MOTOR INTEGRATION: The ability to integrate total visual-motor skills in complex problem solving.

   Example - Pupil can play complex team sports, swim, draw accurate pictures including people, may play musical instruments, write extended letters, move freely about neighborhood and community.

There are many psycho-educational and visual tests that probe these areas in order to determine their efficiency.[16] From these results, a profile of strengths and weaknesses can be formed and an initial remedial program approach may be established.

The visual perceptual skills discussed here are considered important for the child learning to read, but there are other equally as important areas that must be considered also. These are:

1. Language development
2. Audition development
3. Auditory-motor development
4. Ego development

A PROPER PERSPECTIVE:

The two aspects of "vision" and deficiencies in them are not separate, but rather complement one another. They have different relative values of importance depending on what the visual demands are of the child.[17]

The visual perceptual aspect seems to play a greater role in beginning reading (1st and 2nd grade reading level) learning problems, but are usually not major factors in reading inefficiency once basic word recognition skills have been mastered. Visual perceptual deficiencies may have some deterrent effect on conceptualization during reading, but they generally tend to play a minor role as reading skills increase.

As the visual demands change with increases in reading skill (upper elementary reading levels), the visual mechanism aspect plays a greater role. Mild interferences in fusional (convergence-divergence ability) and accommodative facility can be quite interfering with the child's efficiency.[18, 19] Hyperopia and hyperopic astigmia were found to be much more related to class repetition and reading problems than were other types of refractive errors, such as, myopia. Both female and male grade repeaters with hyperopia present occurred in 20% to 33-1/3% of the cases from grades 1 to 4 in one major study of 3,600 children.[20] In a similar study using the Orinda criteria[21] of our learning disability classes (population 52), 25% of the students had hyperopia and focusing strain, while only 3% were myopic. Of these 25% only 4% were aware of any visual problem that required clinical care. The nurses screening had not identified these children. When referrals were followed through by the parents, approximately 48% showed significant changes in classroom performance. (Attention span had increased, they were no longer tilting their heads or holding the work material close to their eyes, and the teacher noted a general increase in working ability).

The correction of the "visual mechanism" aspect did not significantly alter their visual perceptual or reading problems, i.e., they still had reversals, poor hand-writing, directional confusion, etc. There was, however, a general increase in visual efficiency in order that the visual perceptual aspect may be concentrated upon with somewhat greater ease.

## CONCLUSIONS AND IMPRESSIONS:

In order to educationally attack the vision status of the learning disabled child the following seems to be indicated:

1. An analysis of the visual demands for a particular child relative to his or her visual skills, both in the "visual mechanism" aspect and the "visual perceptual" aspect is a necessity. The priority of the type of remedial approach, visually, if there are deficiencies, should be dependent on the visual demands, i.e., reading readiness vs. conceptual and factual level of reading.

2. The assessment of the "mechanism" aspect of vision is beyond the scope of routine vision screening at present. It will require either full visual examinations privately or a modified screening program by eye care professionals in conjunction with the nurse in order to provide adequate answers to whether or not the child can use his eyes efficiently. When

both aspects of vision are assessed, then relative to the child's visual demands, the visual problems may be approached in an efficient manner.

There is another important point that should be considered when we attempt to evaluate vision. The tests, either clinical or psycho-educational, are revealing visual deficiencies relative to some normal standards. They are not indicating necessarily the presence of a visual problem. The deficiencies only become a manifest problem when the visual demands exceed the child's visual skills and the child's ability to compensate for skill weaknesses. For example, suppose we have two children with very similar visual findings but one comes from a highly motivated (reading oriented) home environment, has personal drive (ego strength), has good teaching, and has a broad experiential background and the other lacks this type of environment and personality strength. Then we would, in most cases, find that the first child does not have a visual problem even though deficiencies may be demonstrated, while the other has a manifest problem since he would attempt to withdraw from a stressful environmental demand or inadequately compensate for the weaknesses.

The reason for raising this last point is to again emphasize that a vision deficiency (of either type discussed) interference with reading and classroom performance must be determined by a thorough individual visual evaluation and specific judgment of the particular child's situation.

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    3. Detroit Tests of Learning Aptitude.
    4. Professional optometric examination (Developmental Vision)
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    6. Beery-Buktenica Visual-Motor Integration Test.
    7. Bender Visual-Motor Gestalt.
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# APPENDIX N

## ROLE OF THE LANGUAGE CONSULTANT

## THE ROLE OF THE LANGUAGE CONSULTANT

Language in children with learning disabilities is often one of the major areas of difficulty. Because of language problems it is of the utmost importance that a continuing program of language development be instituted. This program takes the format of diagnosis (evaluation) and educational programming. The individuals who provide this type of support for the child are the language consultant, the teacher, and the parent.

The diagnosis of language difficulties is not an easy task. Indeed, in comparison with other specific problems insofar as learning disability is concerned, it is probably the most difficult area to evaluate.

The language consultant is concerned with the total child. In order to complete an adequate language evaluation and prescribe an educational program, the language consultant must first of all observe the child in an educational setting. It is necessary to have discussions with the child's teachers, parents, and other interested personnel such as the visual perceptual or motor consultant, psychologist, social worker, etc..

A prerequisite to any diagnostic evaluation is knowledge and awareness on the part of the testor of developmental language processes as well as the remediation techniques that are most effective. A test such as the Illinois Test of Psycholinguistic Abilities or sub-tests of the Binet, Wechsler, etc. are relatively useless if they are not viewed from an educational programming viewpoint. The language consultant has a wealth of knowledge regarding the application of specific techniques to be utilized in developing language.

Once the assessment of language capability is made, the teacher and the parent, in conjunction with the language consultant, become the vehicles whereby techniques are developed and adapted on the basis of the child's needs. Regular conferences between teacher-consultant, consultant-parent, and teacher-parent-consultant are an absolute must. The by-words during the conference periods are re-assessment and re-direction. What techniques have been tried? What techniques have been successful? What techniques have been unsuccessful? Where do we go from here in regard to change or modification of activity?

How does the language consultant aid the individual child? In many cases, there is a question of class placement. If there is a suspected language disability, a language evaluation could determine whether a child should be placed in a regular classroom or a special setting. The language consultant is expected to work with the teacher who has a child in the class who has specific language disabilities. This can encompass special materials, specific demonstrations, dialogue and orientation of language problems, and reinforcement of the teacher's correct teaching techniques.

Work with the child can be coordinated with the classroom, speech and language therapy and the learning disability resource room. It is necessary that remediation should be consistent and that all members of the team should be aware of the specific goals and needs of the individual child.

Many children with language difficulties must be placed in a full time learning disability classroom. In this case, the language consultant works closely with the teacher, suggesting various techniques and uses of materials which might be helpful to the child.

How does the language consultant aid a complete class? At times a language consultant may feel that a complete class could benefit from a language improvement program. These classes may be pre first grades, classes from deprived areas, or classes with children whose parents speak another language. The needs of the complete class must be assessed, by a basic concept test, by teacher and consultant observations and by class performance. The language remediation program is determined by the basic needs of the group.

It is emphasized that the language consultant demonstrates various techniques and explains the rationale behind the specific activities, but the actual program should be continued by the classroom teacher. These activities should stress remediation and improvement of basic skills which are needed before the child can experience successful academic progress.

Some of these basic skills include: improving group listening skills, listening to and understanding rhythms, rhythmic patterns, and rhythmic sequencing, increasing visual and auditory short term or sequencing skills, improving expressive language, increasing vocabulary concepts, understanding syntactic rules, learning to follow directions, etc..

The same type of program can be established in a learning disability classroom with the language consultant along with the teacher assessing the immediate and long term needs of the group.

There is a need to acquaint the parents, teachers, and other interested personnel about the various aspects of language processes and development. This is extremely important so that there can be more understanding of the child's problems.

Language can be divided into receptive, associative, and expressive processes. The receptive process is the ability to comprehend visual and auditory symbols. The associative process is the ability to relate, organize and manipulate visual or auditory symbols in a meaningful way. The expressive process involves the child's ability to use verbal or manual symbols to transmit an idea.

There are also automatic skills which are abilities to perform automatic, nonsymbolic tasks. These skills seem to be imperative for adequate learning ability. Language can be described according to the modality used; either auditory-vocal or visual manual.

A diagnosis of language problems must encompass an understanding of the complete process. For example: if a child scores low in auditory-vocal skills, the possibility of a hearing loss must be explored. If a child scores low in visual-motor areas, a visual and visual perceptual evaluation is required.

The automatic skills which include visual and auditory sequencing, grammatic visual and auditory closure, and sound blending seem to be prerequisites for adequate reading skills.

If there seem to be great inconsistencies in language skills, emotional problems can be suspected.

Teacher, parent and language consultant each contributes to the constant re-evaluation and planning of the individual child's language program.

It is the function of the language consultant to coordinate these efforts in the home and school environment in view of language development processes and appropriate educational techniques.

# APPENDIX O

# GENERAL INFORMATION REGARDING LEARNING DISABILITIES

## BUCKS COUNTY PUBLIC SCHOOLS

## CHILDREN WITH LEARNING DISABILITIES

DEFINITION: The Association of Children with Learning Disabilities defines this student as "...a child with normal or potentially normal intelligence who has learning disabilities of a perceptual, conceptual or coordinative nature..." The identifying characteristics of a child with specific learning disability may include among others:

1. poor auditory memory
2. poor auditory discrimination
3. poor sound blending
4. poor visual memory
5. poor visual discrimination
6. inadequate ability in visual and visual-motor sequencing
7. right-left confusion, with problems in laterality, directionality and orientation
8. fine motor incoordination
9. non-specific awkwardness or clumsiness
10. ocular imbalance
11. attention defect and disordered or hyperkinetic behavior
12. ego development problems
13. social development problems

ELIGIBILITY FOR SERVICES: A child is eligible for specific special educational services when the learning disability with a suspected organic-neurological-perceptual base is so interfering with the regular class program offerings that special techniques are necessary for educational habilitation. The incidence of children with learning disabilities as reported in the literature varies from 20% to 1% depending on the type of criteria used in such study. Figures most consistently reported place the incidence at approximately 5 to 7 percent of the elementary school population, or approximately one of every twenty children. This does not mean that each child with a learning disability should be placed in a special class. It does mean, however, that some type of curriculum adjustments must be made so that the child becomes a performer

The resource room, itinerant and special tutoring services should service those children who do not need a full-time habilitation program.

Preventive measures. Indications are that with intensified diagnostic procedures and curriculum adjustments on the kindergarten and first grade levels much can be done in preventing or lessening serious learning disability. Summer workshop and other in-service techniques for kindergarten and first grade teachers can help the teacher to start the habilitation process before the learning problem becomes too serious.

KINDS OF DIAGNOSTIC INFORMATION NEEDED: In order to provide proper curriculum adjustments for children with learning disabilities, the following kinds of information are needed:

1. An assessment of the child's learning style - how does the child learn - what sensory channels is he using and to what degree - which of the channels is he using ineffectively.

2. Assessment of the child's learning state. What are his abilities and limitations intellectually, emotionally, physically and academically.

In assessing the abilities and limitations of the child, the following have proven beneficial:

Intelligence

WISC, Peabody Picture Vocabulary Test, Binet

It is imperative that in addition to total scores other assessment be used, e.g., how does the child approach a new task - when do frustrations occur - what modalities are primarily used - which are used ineffectually.

Subtests analysis - item analysis

Optomising techniques for finding clues to learning patterns.

rather than another student with good potential who is educationally handicapped and 'socially promoted'.

TYPES OF SERVICE: Special Class for those pupils with a prognosis of high risk of adjusting to the regular class program (approximately 1/2 to 1% of students). The special class would make provisions for reduction of space and stimuli, structuring of program, increasing stimuli of materials and continuous diagnostic teaching. The purpose of this phase of the program should be habilitation - with the goal of returning the student to one of the tracks of the school program as soon as possible. Duration of enrollment can be reasonably predicted to be from one to five years.

Resource Room - Programs utilizing resource room service can provide for a larger number of children (15 to 25 children vs. 6 to 10 children in a full-time class setting) because of the shorter time participation per day per child. However, this type of service requires greater flexibility in administration and possibly greater initial financial outlay for the variety of instructional materials needed for the larger and more divergent groups served in this setting.

Itinerant supportive service in the regular classroom, which is supportive to the pupil and helps this teacher program better for the child, is another approach to be considered. Number of students, classroom teachers and school districts served by each such teacher will be dependent on whether emphasis is on remedial techniques for pupils or on supportive help for teachers.

Special Tutoring for certain pupils may be available through a local school district arrangement through remedial and supportive programs.

## Academic Aptitude and Achievement

Standardized readiness and achievement tests - or parts of these tests

Samples of the child's reading patterns, writing, drawings, activity work papers, number papers, etc.

Detroit test of Learning Aptitude - gives many indications of strengths, weaknesses - how the child learns - how he approaches new tasks, etc.

## Auditory Perception - Language Development

Illinois Test of Psycholinguistic Abilities - Parsons Language Sample

Speech patterns, auditory memory, auditory discrimination, sound blending

Does the child understand you - Does he understand directions, to what degree

Does he communicate meanings or feeling - Does he follow directions, to what degree

## Visual Perception - Visualization Development

Bender-Gestalt

Visual motor parts of Detroit

Frostig - Developmental Test of Visual Perception

Winterhaven Visual Perception Screening Test

Optometric or ophthalmological examination for not only acuity but for visual development (eye-movement skill, eye-teaming skill, eye-hand coordination, visual form perception)

## Perceptual Motor

Purdue Perceptual Motor Survey

Observation of (a) walking straight line, (b) heel to toe walking on straight line, (c) balance board, (d) walking beam, (e) standing on one leg (with eyes opened and eyes closed),(f) hopping, (g) skipping, (h) posture.

## Social Maturity

Vineland Social Maturity Scale

## Personality and Ego Development

Observation and Anecdotal Records

Rorschach

House-Tree-Person Test

Psychiatric Evaluation

Observation of the Child in Classroom

## Neurological Examination

A neurological examination is indicated when there is physical evidence and/or other evidence that the perceptual processes may be interfering with learning tasks. Using the identifying characteristics listed on the first page and the individual testing as described will help in making a decision concerning the advisability of a neurological examination - when requesting such an examination give the examiner as much information as you possibly can and ask for specific information particularly as it relates to the child's educational adjustment.

# BUCKS COUNTY PUBLIC SCHOOLS

Intermediate Unit No. 22

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BUCKS COUNTY PUBLIC SCHOOLS
Intermediate Unit No. 22
County Administration Building
Doylestown, Pennsylvania 18901